



**In the horns of the dilemma: socioemotional wealth,
financial wealth and acquisitions in family firms**

Journal:	<i>Journal of Management</i>
Manuscript ID	JOM-15-0128.R2
Manuscript Type:	Original Research
Keywords:	Behavioral Theory of the Firm < MACRO TOPICS, Family Firms < MACRO TOPICS, Family Business < MICRO TOPICS
Abstract:	We posit that family firms often face a dilemma in their strategic decision making: whether to maintain current socioemotional wealth (SEW) or pursue prospective financial wealth. Applying such a mixed gamble perspective to acquisitions, family owners assess potential acquisitions with regard to their impact on both wealth dimensions. In line with this reasoning, we find that family control implies a general reluctance to acquire, and, when an acquisition happens, a preference for related targets. Because financial and socioemotional viewpoints lead to largely incompatible predictions about the occurrence and relatedness of acquisitions, family firm owners use their firm's vulnerability as a signal. Increased vulnerability leads to a heightened propensity to prioritize financial over SEW problem framing, which is reflected in the acquisition of unrelated targets. Empirical results are supportive of these predictions.

SCHOLARONE™
Manuscripts

SEW

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

**In the horns of the dilemma: socioemotional wealth, financial wealth and acquisitions in
family firms**

Luis R. Gomez-Mejia
University of Notre Dame

Pankaj C. Patel
Villanova University

Thomas M. Zellweger
University of St. Gallen

For Peer Review

IN THE HORNS OF THE DILEMMA: SOCIOEMOTIONAL WEALTH, FINANCIAL WEALTH AND ACQUISITIONS IN FAMILY FIRMS

INTRODUCTION

Over the years, researchers have examined why managers engage in acquisitions in substantial detail. The literature features acquisition experience (e.g., Hayward, 2002), market power (e.g., Hitt, Harrison & Ireland, 2001), cost reductions (e.g., Graham, Lemmon & Wolf, 2002), resource redeployment (e.g., Capron, Dussauge & Mitchell, 1998; Uhlenbruck, Hitt & Semadeni, 2006), and market discipline (e.g., Rhodes-Kropf, Robinson & Viswanathan, 2005) as important strategic drivers of acquisitions. This well-developed literature is predicated on the idea that agents survey the market for corporate control for economically advantageous acquisition targets (e.g., Barkema & Schijven, 2008b; Deutsch, Keil & Laamanen, 2007).

More recently, there has been a turn toward behavioral motives of managers to engage in acquisitions (e.g., Iyer & Miller, 2008). This research shows that the likelihood of an acquisition alters depending on whether a firm performs above or below aspiration levels. Interestingly, however, behavioral motives of owners are largely unexplored. Behavioral motives to engage in acquisitions could differ with ownership configuration as dominant owners differ in their goal sets, even among publicly traded firms (e.g., Desender, Aguilera, Crespi & Garcia-Cestona, 2013; Thomsen & Pedersen, 2000). We address this gap in the literature by examining the acquisition behavior of publicly listed family firms and suggest that family firms differ from their nonfamily counterparts by facing two types of utility dimensions in tandem, financial and socioemotional wealth (SEW) (Gomez-Mejia, Haynes, Nunez-Nickel, Jacobson & Moyano-Fuentes, 2007), which should lead to divergent acquisition behaviors. SEW captures the family's

1
2
3 stock of social, emotional and affective endowments vested in the firm, such as the opportunity
4
5 to pass the firm on to future family generations (Zellweger, Kellermanns, Chrisman & Chua,
6
7 2012), reputational advantages from being associated with the firm (Deepphouse & Jaskiewicz,
8
9 2013), and the preservation of benevolent ties among family members and with other
10
11 stakeholders (Cruz, Gomez-Mejia & Becerra, 2010). Thereby, the financial and socioemotional
12
13 utility dimensions are not fully fungible and a change in one utility dimension often leads to an
14
15 opposite change in the other utility dimension (Combs, Penney, Crook & Short, 2010;
16
17 Leitterstorf & Rau, 2014). When taking a strategic decision, such as about an acquisition, family
18
19 business owners are thus caught in a dilemma wherein they have to weigh the anticipated losses
20
21 and gains (Bromiley, 2009, 2010) in both financial and SEW terms, what we refer to as the
22
23 mixed gamble of family firm owners. More specifically, family business owners have to weigh
24
25 the likely gains and losses of strategic decisions in terms of their impact on both, the current
26
27 SEW endowment and future financial wealth.
28
29
30
31
32
33

34 We propose that facing the horns of this dilemma, family business owners will give
35
36 strong consideration to the firm's vulnerability, which results from performance below aspiration
37
38 levels and/or low levels of slack. This is because financial peril ultimately threatens the survival
39
40 of the firm, the source of the family's financial wealth and SEW. In line with a behavioral
41
42 perspective of decision-making, under normal conditions actors should be loss averse (Wiseman
43
44 & Gomez-Mejia, 1998), focus on their current (socioemotional) endowment, and discount more
45
46 strongly strategies with uncertain upside. Under vulnerability, however, decision makers solve
47
48 the dilemma by progressively focusing on prospective financial considerations and are thus
49
50 willing to take risks even if this occurs at the expense of SEW.
51
52
53
54
55
56
57
58
59
60

1
2
3 We apply this conceptualization of mixed gamble of strategic decision making in family
4 firms to the case of acquisitions and their relatedness. Financial considerations stress the desire
5 to diversify the firm's portfolio under concentrated ownership, whereby acquisitions, in
6 particular unrelated ones, should appear attractive. In this manner concentrated owners may
7 create new revenue streams and diversify their risk (e.g., Mork, Wolfenzon & Yeung, 2005;
8 Shleifer & Vishny, 1986). SEW considerations, in contrast, stress that acquisitions, especially
9 unrelated ones, lead to losses in familial control, water down the family firm's identity, and
10 weaken social ties linked to the firm. Thus, family firm owners face a dilemma: Should they
11 engage in acquisitions, and in particular unrelated ones, in the pursuit of future financial gains, or
12 should they refrain from acquisitions, in particular unrelated ones, to preserve current SEW?
13
14
15
16
17
18
19
20
21
22
23
24
25
26

27 Under a behavioral agency decision frame that underlies our theorizing, family
28 businesses should be hesitant to acquire, particularly unrelated firms, because the expected
29 financial gains from acquisitions are ultimately uncertain (e.g., Hitt et al., 2001) and the loss in
30 SEW terms is fairly certain (Gomez-Mejia, Makri & Larraza-Kintana, 2010). Thus, acquisitions
31 are discouraged by family businesses and if they acquire, they prefer related targets.
32 Vulnerability should weaken the family firm's overall reluctance to acquire and also the
33 reluctance to acquire unrelatedly, because if the firm fails to survive SEW and financial wealth
34 would disappear altogether.
35
36
37
38
39
40
41
42
43
44
45

46 Seeing strategic decision making in family firms as mixed gambles we attempt to make
47 four contributions to the literature. *First*, we extend the literature on the influence of ownership
48 types on strategic actions to encompass acquisitions (e.g., Connelly, Hoskisson, Tihanyi & Certo,
49 2010; David, O'Brien, Yoshikawa & Delios, 2010; Lane, Cannella & Lubatkin, 1998;
50 Ramaswamy, Li & Veliyath, 2002). For the case of family firms, we explore how the parallel
51
52
53
54
55
56
57
58
59
60

1
2
3 concern for financial and socioemotional goals biases the occurrence and the relatedness of
4
5 acquisitions. *Second*, to family business research, our mixed gamble perspective reconciles the
6
7 findings by Miller et al. (2010) on the inclination of family firms to prefer unrelated targets with
8
9 those by Anderson and Reeb (2003) and Gomez-Mejia et al. (2010) on the general preference of
10
11 family firms to avoid diversification altogether. With our study we extend the work by Miller et
12
13 al. (2010) and explore the occurrence of acquisitions just as the contingent effect of vulnerability.
14
15 In contrast to Miller and colleagues (2010), but in line with our mixed gamble theorizing, we
16
17 find that when a family firm does decide to acquire, it more likely prefers a related firm.
18
19

20
21
22 *Third*, we contribute to research on the utility considerations of family owners. Previous
23
24 research treats family owners as either concerned with financial goals alone (e.g., Morck &
25
26 Yeung, 2003), socioemotional goals alone (e.g., Berrone et al., 2012), with the protection of
27
28 current SEW endowment (Gomez-Mejia et al., 2007), or with socioemotional gains and losses
29
30 (Gomez-Mejia et al., 2014). We integrate these scattered conceptualizations of family owners'
31
32 goal and portray family owners' decision making as a dilemma in which anticipated losses and
33
34 gains in both financial and SEW dimensions are considered in tandem.
35
36
37

38
39 *Lastly*, we introduce the notion of vulnerability, proxied by below aspiration-level
40
41 performance and the absence of slack, which has a decisive impact on how actors solve the
42
43 decision dilemma. Under vulnerability, SEW and financial concerns are aligned or become
44
45 synoptic as drivers of acquisitions. This is because meeting the firm's financial obligations is a
46
47 necessary condition for the family owners to enjoy any SEW and financial utility. Under
48
49 prosperity, however, SEW and financial goals are at odds as drivers of acquisitions. In the
50
51 absence of performance hazards family principals can afford the luxury of remaining
52
53 undiversified and thus avoid sacrificing SEW through diversification. Also, in a mixed gamble
54
55
56
57
58
59
60

1
2
3 the presence of slack, by reducing vulnerability, does not drive but rather dampens “problemistic
4 search” such as via an unrelated acquisition, which is contrary to predictions of the behavioral
5
6 theory of the firm on slack search (Levinthal & March, 1981).
7
8
9

10 11 12 **THEORETICAL FOUNDATIONS**

13 14 **Behavioral agency, socioemotional wealth and mixed gamble**

15
16
17 The behavioral agency model (BAM) (Wiseman & Gomez-Mejia, 1998) that supports our
18 conceptual frame departs from standard agency arguments in several important ways. Most
19 importantly for the case of our study, BAM sees decision makers not as constantly risk averse,
20 but as loss averse. Decision makers are risk takers in the domain of losses to recoup an
21 unsatisfactory situation. In the domain of gains, however, decision makers are risk averse to
22 protect their endowments (Martin, Wiseman & Gomez-Mejia, 2013). Also, recent developments
23 of BAM relaxes the assumption that decision makers consider financial utility dimensions alone.
24 For instance, Zona, Gomez-Mejia and Withers (2015) argue that executives often engage in
25 interlocks to gain prestige and influence in the industry rather than for financial reasons.
26
27
28
29
30
31
32
33
34
35
36
37

38
39 The collective set of nonfinancial utilities experienced by family owners have been
40 termed socioemotional wealth (SEW), defined as the family owner’s stock of affect vested in the
41 firm (Gomez-Mejia, Cruz, Berrone & De Castro, 2011). SEW encompasses such dimensions as
42 transgenerational control, the preservation of family reputation, benevolent ties within the
43 family, and strong emotional attachment to the firm (Berrone, Cruz & Gomez-Mejia, 2012).
44 SEW is distinct from the nonfinancial goals of nonfamily firms’ managers, such as empire
45 building, attending to narcissistic needs, and power (Chatterjee & Hambrick, 2007; Finkelstein,
46 1992; Trautwein, 1990). Managers of nonfamily firms may enjoy non-pecuniary rewards
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 (Chatterjee & Hambrick, 2007) but, given a contractual relationship with the firm that is subject
4
5 to rescission, they are less bound to a particular organization. In contrast, the SEW goals of
6
7 family owners tend to be fully and irrevocably grounded in the family firm. Also, family owners
8
9 have an extended time horizon that often spans across generations (Zellweger et al., 2012).
10
11 While nonfamily managers seek to build reputations and empires mainly for themselves, the
12
13 focus of family owners is on the family group (Deephouse & Jaskiewicz, 2013). In short, the
14
15 nonfinancial goals of family actors are distinct from those of nonfamily actors due to their firm-
16
17 specific link, extended time horizon, focal group, and dimensionality.ⁱ
18
19

20
21
22 There are multiple recent studies that provide compelling evidence for family firms'
23
24 concern for SEW (for an overview refer to Gomez-Mejia et al., 2011). Some of these studies
25
26 suggest that family firms are concerned with socioemotional goals alone (Berrone et al., 2012),
27
28 seek to protect their SEW endowment (Gomez-Mejia et al., 2007), or weigh the socioemotional
29
30 gains and losses in making strategic decisions (Gomez-Mejia, Campbell, Martin, Hoskisson,
31
32 Makri & Sirmon, 2014). These findings stand in strong contrast to the prominent agency-based
33
34 research suggesting that family owners are concerned with financial goals alone (Morck &
35
36 Yeung, 2003). In light of this tension about relevant goals, still other studies have alluded to the
37
38 interplay of financial and SEW goals (Chrisman & Patel, 2012; Gomez-Mejia et al., 2010; Patel
39
40 & Chrisman, 2014) and suggest that under strong financial performance SEW concerns take
41
42 precedence over financial concerns, while financial duress pushes SEW concerns to the back.
43
44 Broadly spoken, these studies thus assume that family firms are either concerned with SEW or
45
46 financial wealth. What is lacking, however, is a reconciliation of these scattered views of family
47
48 owners' goals, which at the same time explains the strategic decision making in this type of firm.
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

In moving towards such an integrated perspective, we theorize that family controlled firms face a dilemma in their strategic decision-making by having to assess the likely gains and losses of their actions in financial and socioemotional terms in tandemⁱⁱ. More specifically, we suggest that family owners have to weigh the likely outcomes of strategic decisions in terms of their impact on both, the current SEW endowment and future financial wealth. Weighing the upside and downside of a strategic action in these two utility dimensions in parallel is challenging for decision makers for two main reasons: First, the two utility norms are not fully fungible (i.e. convertible), which inhibits a combined consideration along the lines of some “net” effect by summing the expected gain and loss portions of each (Wu & Markle, 2008). Second, a change in one utility dimension often leads to an opposite change in the other utility dimension (tradeoff between financial and SEW considerations) (Chrisman & Patel, 2012; Gomez-Mejia et al., 2011; Leitterstorf & Rau, 2014).

Being caught in this decision dilemma with potential gains and losses alludes to the idea of mixed gamble. Bromiley (2009, 2010) argues that most strategic choices confronted by managers represent mixed gambles, given the possibility of gains and losses associated with these decisions (MacCrimmon & Wehrung, 1990; March & Shapira, 1987; Martin et al., 2013; Wu & Markle, 2008). Mixed gambles acknowledge the idea that managers rarely confront strategic choices involving win-win or lose-lose outcomes, that is to say pure gambles. While decision makers in family and nonfamily firms alike have to grapple with mixed gambles, family firms face an extra level of complexity in that they are faced with a mixed gamble that entails two not fully fungible currencies, that is financial and SEW, which normally trade off against each other (Combs et al., 2010). The tradeoff between financial and SEW considerations will often lead to win-lose or lose-win outcomes respectively when these outcomes are assessed in

1
2
3 financial and socioemotional terms. For instance, a turnaround measure could result in financial
4 gains but at the same time detracts from SEW, while hiring a limitedly qualified family member
5
6 should lead to an opposite pay off scenario in the two utility dimensions.
7
8

9
10 We theorize that in the horns of this mixed gamble dilemma, decision makers will give
11 strong consideration to the firm's vulnerability, which results from performance below aspiration
12 levels and/or low levels of slack. Under low vulnerability, SEW and financial goals are at odds
13 as drivers of strategic change. In absence of financial duress, family business owners should be
14 risk averse and strongly discount the uncertain upside tied to a strategic option while giving more
15 emphasis to the protection of current endowments. Under vulnerability, however, SEW and
16 financial concerns are aligned as drivers of strategic change. This is because meeting the firm's
17 financial obligations is a necessary enabling condition for family owners to enjoy SEW and
18 financial utilities in tandem. Financial duress should thus emphasize the need for financial
19 improvements, even if this implies accepting transient losses in SEW. Our theorizing thus
20 assumes that because strategic change implies a tradeoff between socioemotional and financial
21 outcomes in most cases, SEW and financial concerns are normally at odds as drivers of strategic
22 change. Under vulnerability, however, SEW and financial concerns are aligned as drivers of
23 strategic change since inactivity under threat would mean "throwing the baby out with the bath".
24 This is because if the firm fails to survive, SEW and financial wealth would disappear altogether.
25 Integrating these arguments, SEW thus serves as a catalyst for strategic change under
26 vulnerability, while it serves as an impediment to strategic change under prosperity.
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49

50 **Occurrence of acquisitions as mixed gamble**

51 An intriguing context to test our theorizing is to analyze acquisitions undertaken by family firms.
52
53 Firms normally engage in acquisitions in the pursuit of important financial gains, as outlined in a
54
55
56
57
58
59
60

1
2
3 wide array of research (Haleblian, Devers, McNamara, Carpenter & Davison, 2009; McNamara,
4
5 Haleblian & Dykes, 2008). But from many real life examples and multiple academic studies we
6
7 have to conclude that the hoped for financial gains are rather uncertain (e.g., Capron & Pistre,
8
9 2002; King, Dalton, Daily & Covin, 2004; Masulis, Wang & Xie, 2007). Many acquisitions
10
11 result in lower than expected market power (e.g., Hitt et al., 2001), disappointing cost reductions
12
13 (e.g., Graham et al., 2002), or inefficient resource redeployment (e.g., Capron et al., 1998;
14
15 Uhlenbruck et al., 2006) post acquisition.
16
17
18

19
20 The literature is more definite, however, about major downsides of acquisitions in terms
21
22 of SEW losses to the family. First, acquisitions often require external financing. Thus,
23
24 acquisitions tend to weaken family control and independence, an important component of SEW
25
26 (Dreux, 1990; Zellweger et al., 2012). Second, the acquirer's well-established social networks
27
28 may be disrupted by the acquisition of a new firm (Friedland, Palmer & Stenbeck, 1990). For
29
30 example, successful acquisitions require opening up social networks at both the acquiring and the
31
32 acquired firm (Bergh & Gibbons, 2011; Capron & Pistre, 2002). The family then depends on
33
34 managers, experts and consultants from outside the family and most often also the original firm
35
36 (Gomez-Mejia et al., 2010). This undermines pre-existing, close-knit and benevolent ties, such as
37
38 the ones with long-time employees of the original firm that are so dear to family owners (Cruz et
39
40 al., 2010). Third, threats to the firm's and the family's reputation may arise from the change in
41
42 combined product and resource portfolios. In comparison to organic growth, acquisitive growth
43
44 expands existing products, brands, and markets in a short period of time, which often dilutes a
45
46 consistent image of the firm and the projection of the family owners onto that image (Deepphouse
47
48 & Jaskiewicz, 2013). Finally, the scenario of a failed acquisition, which may require the
49
50 divestment of the once-acquired firm, will be seen as a major deterrent for the family who tends
51
52
53
54
55
56
57
58
59
60

1
2
3 to view the firm as an extension of that family. Given the family's long-term association with the
4
5 firm, it will avoid decisions that may require it to admit a mistake at a later stage.
6
7

8 Combining these arguments, family owners face a dilemma with acquisitions that pose
9
10 an uncertain upside in terms of higher future financial wealth and a certain downside in terms of
11
12 losses in current SEW endowments. In line with BAM predictions about a preference for wealth
13
14 in hand in the face of uncertainty (Wiseman & Gomez-Mejia, 1998), we suggest that a certain
15
16 loss in SEW looms larger than the uncertain future financial rents from an acquisition. Under
17
18 these circumstances, and as our baseline hypothesis, we thus expect that family principals will
19
20 avoid acquisitions. Thus,
21
22

23
24
25 *Hypothesis 1 (H1): Family control lowers the likelihood of acquisitions.*
26

27 The non-convertibility and the dimensionality of SEW and financial goals violate the
28
29 standard models of optimization, which assume that "there is a common currency for all beliefs
30
31 and desires, namely, quantitative probabilities and utilities" (Gigerenzer & Todd, 1999, p.10).
32
33 Hence, family actors are prone to seek information that provides signals about how to solve the
34
35 decision dilemma. Because the worst possible disaster is the loss of total financial wealth and
36
37 SEW that would result from the failure of the firm, we argue that family firm owners will weigh
38
39 the financial and socioemotional gains and losses based on the firm's vulnerability. Two such
40
41 sources of vulnerability are below-aspiration-level performance and low levels of slack.
42
43
44

45
46 If firm performance meets or exceeds expectations, family actors should be risk averse,
47
48 focus on their current (socioemotional) endowment, and discount strategies with uncertain
49
50 upside. Under prosperity, the vulnerability of the family owner is low, limiting the need for
51
52 change. In contrast, as performance falls below aspiration levels vulnerability increases
53
54 accordingly (Cyert & March, 1963; Greve, 1998; Iyer & Miller, 2008), and as a result family
55
56
57
58
59
60

1
2
3 firm principals should feel greater pressure to improve the firm's financial situation and reduce
4 the risk of failure. While "problemistic search" may be triggered for all firms facing performance
5 below aspirations (Cyert & March, 1963), this condition should be particularly alarming for
6 firms with higher levels of family control, because both the increasing concentration of financial
7 wealth and SEW are at stake. Hence, under the menace of personal and financial ruin financial
8 and socioemotional concerns become synoptic, inducing family principals to engage in
9 acquisitions hoping to reverse a hazardous situation, even if this requires the family to accept
10 losses to their SEW.
11
12
13
14
15
16
17
18
19
20
21

22 In other words, the change toward acquisition behavior at $t + n$ as a result of
23 performance below aspirations at $t + 0$ should be more aggressive for family-controlled firms
24 because both concentrated financial wealth and SEW are at stake (Chrisman & Patel, 2012).
25 Thus, family owners will frame the likely outcome of an acquisition as a certain SEW loss with
26 uncertain financial gains if firm performance meets or exceeds aspiration levels ("little to gain,
27 much to lose" framing). In contrast, performance below aspiration levels will reverse the framing
28 to "much to gain [in the form of both higher future financial wealth and the preservation of
29 SEW] and little to lose." Taken together, we argue that below-aspiration-level performance
30 serves as a signal to family owners about how to solve the decision dilemma, intensifying the
31 need to reverse a deteriorating financial situation to preserve SEW and financial wealth. Family
32 principals should be more willing to engage in an acquisition in this situation, even if the
33 acquisition may require significant risks and transient losses in SEW.
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49

50 *Hypothesis 2 (H2): Performance below aspiration levels attenuates the negative effect*
51 *of family control on the likelihood of acquisitions.*
52

53
54 Next to performance relative to aspirations, slack also provides information about the
55 vulnerability of family principals. Slack, defined as unused resources available to the firm (Iyer
56
57
58
59
60

1
2
3 & Miller, 2008: 811), reduces the risk borne by family owners because it buffers against
4 performance shortfalls (Bourgeois, 1981). To family owners, slack represents the resources to
5
6 withstand economic jolts, signals stability and wealth security, and provides the opportunity to
7
8 pursue SEW, even if it also implies certain inefficiencies, such as foregone growth opportunities
9
10 through acquisitions. Slack should thus reinforce a sense of performance satisfaction and spare
11
12 its owners a sense of urgency. In such a comfortable position, family owners should be risk
13
14 averse and strongly discount the promised future financial gains tied to strategic change,
15
16 emphasize the sure losses to SEW tied to such change, thereby discouraging acquisitions.
17
18
19
20
21

22 Traditional behavioral logic posits that slack should enable experimentation and “slack
23
24 search” (Levinthal & March, 1981), thereby making acquisitions more likely. According to this
25
26 view, slack provides maneuvering room with a direct positive effect on experimentation (Cyert
27
28 & March, 1963). However, more recent research suggests that slack has an indirect effect on firm
29
30 behavior (Arrfelt, Wiseman & Hult, 2013), which functions as an inertia-fostering buffer (Hitt,
31
32 Hoskisson & Ireland, 1994) that reinforces clinging to the status quo (Kraatz & Zajac, 2001).
33
34 When slack resources coincide with high levels of family control, family firms should be less
35
36 inclined to acquire. That is, by reducing vulnerability, slack should intensify the general
37
38 reluctance among family principals to engage in acquisitions.
39
40
41
42

43
44 *Hypothesis 3 (H3): Slack strengthens the negative effect of family control on the*
45
46 *likelihood of acquisitions.*

47 **Relatedness of acquisitions as mixed gamble**

48
49 Miller and colleagues (2010) argue that the business risk considerations of undiversified family
50
51 owners should lead to more unrelated acquisitions. In line with this portfolio logic (e.g., Amihud
52
53 & Lev, 1981; Anderson & Reeb, 2003; Dennis, Dennis & Sarin, 1997; Shleifer & Vishny, 1986),
54
55 Miller and colleagues find that, although family firms diversify less, those that do choose to
56
57
58
59
60

1
2
3 acquire prefer unrelated targets. Diversifying acquisitions compensate for performance variance
4 across a portfolio of businesses and are thus an important instrument to reduce overall business
5 risk (Anderson & Reeb, 2003). However, while diversified acquisitions benefit family principals
6 by reducing business risk, their performance consequences are less predictable. While some
7 researchers find that diversified firms trade at a discount relative to single-segment firms (e.g.,
8 Berger & Ofek, 1996; King, Slotegraaf & Kesner, 2008; Lang & Stulz, 1994; Servaes, 1996),
9 others suggest that unrelated diversification results in a premium (Campa & Kedia, 2002;
10 Graham et al., 2002; Villalonga, 2004). Therefore, the overall financial attractiveness of
11 unrelated acquisitions will be challenging to assess. Such a strategy may reduce business risk,
12 but the total financial wealth effects are uncertain because of possible performance shortfalls.
13
14
15
16
17
18
19
20
21
22
23
24
25
26

27 In light of our dilemma reasoning, we expect family firm owners to assess not only the
28 financial but also the socioemotional implications of a diversifying acquisition. For multiple
29 reasons, unrelated acquisitions should diminish SEW for family principals. First, and as noted by
30 Barkema and Schijven (2008b), achieving organizational fit and reaping the rewards from the
31 acquisition (in particular of unrelated firms) often require important restructuring on the part of
32 the acquirer, which erodes familial control. Second, unrelated acquisitions make existing social
33 ties less valuable because new connections with unfamiliar suppliers, clients, and advisors have
34 to be secured (Hitt et al., 2001). Third, a family firm engaging in unrelated acquisitions would
35 probably need to recruit executives who possess diverse skills not available within the family. It
36 would have to adopt new routines that stray from time-proven methods (Eisenmann, 2002;
37 Vermeulen & Barkema, 2001). The value of the long-term established and nurtured explicit and
38 implicit knowledge would be sharply decreasing (Duran, Kammerlander, Van Essen &
39 Zellweger, 2015), and with it the appreciation for long-term trusted employees. Thus, to a greater
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 extent unrelated acquisitions are prone to disrupt the benevolent ties among family owners and
4 managers. Lastly, when a company bundles dissimilar products and unrelated technologies and
5 serves dissimilar markets through an unrelated acquisition, it becomes more difficult for family
6 members to derive a coherent family identity from the firm (Pratt & Foreman, 2000).
7
8
9
10
11

12
13 Unrelated diversifying acquisitions thus pose a dilemma for family owners. On the one
14 hand, such acquisitions may mitigate business risks and, potentially, protect total family
15 shareholder wealth from unexpected downturns in particular business segments (Miller *et al.*,
16 2010). On the other hand, for the reasons noted above, this strategic choice will appear
17 unattractive from a SEW perspective. In line with BAM (Bromiley, 2009, 2010; Wiseman &
18 Gomez-Mejia, 1998), we suggest that anticipating a certain loss in SEW looms larger than the
19 overall uncertain future of economic rents from an unrelated acquisition. While the financial
20 payback from an unrelated acquisition is likely to be perceived as similarly uncertain by
21 nonfamily firms, the certain loss in SEW should lead to an even more pronounced preference for
22 related targets when the firm is under family control. Contrary to the predictions of Miller *et al.*
23 (2010), when a family firm does acquire, it should thus more likely opt for a related firm.
24
25
26
27
28
29
30
31
32
33
34
35
36
37

38
39 *Hypothesis 4a (H4a). When family-controlled firms decide to acquire other firms, they*
40 *are more likely to prefer related acquisitions than nonfamily firms.*
41
42

43 Despite the negative consequences for SEW, family firms may acquire unrelated
44 targets. In line with our previous arguments on the occurrence of acquisitions, performance
45 below aspiration level should tip the scale in the decision dilemma given that the specter of firm
46 failure implies the loss of both financial wealth and SEW. In other words, the firm's viability as
47 an ongoing concern is a necessary precondition for the family to enjoy any SEW and financial
48 utility. Thus, one would expect that when performance is below aspiration level, family
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 principals should exhibit an increased willingness to acquire an unrelated firm to reap hoped-for
4
5 financial benefits, such as a reduced portfolio risk.
6
7

8 If firm performance meets or exceeds aspiration levels, family owners will frame the
9
10 likely outcome of an unrelated acquisition as little to gain in financial wealth and much to lose in
11
12 SEW. Above-aspiration performance family owners will thus contemplate the situation from a
13
14 gain perspective and have few incentives to take risks and depart from the status quo and their
15
16 preference for related targets. Performance below aspiration levels, however, reverses this
17
18 context into a loss framing, so that family firms will tolerate an uncertain financial payback from
19
20 an unrelated acquisition in order to reap the benefits of reduced portfolio risk, even if this means
21
22 sacrifices in SEW. Under below-aspiration performance, to ultimately protect the survival of the
23
24 firm and hence all financial wealth and SEW, family control should lead to a particularly strong
25
26 desire to mitigate business risk and hold an unrelated portfolio of firms (Argote & Greve, 2007;
27
28 Shimizu, 2007). We argue, therefore, that performance below aspiration level acts as a “fear
29
30 factor”, whereby SEW and financial concerns join forces towards weakening family firms’
31
32 preference for related targets. Put differently, performance below aspiration levels pushes family
33
34 firms toward more unrelated acquisition targets in order to diversify business risks.
35
36
37
38
39

40
41 *Hypothesis 4b (H4b): Under conditions of performance below aspiration level, family-*
42 *controlled firms that decide to acquire other firms are less likely to engage in related*
43 *acquisitions than nonfamily firms.*
44

45
46 As a further test of our dilemma perspective and the decisive role of vulnerability, we
47
48 see slack as a driver for choosing a particular type of diversification. Family firms enjoying high
49
50 levels of slack feel securely positioned and comfortably ensconced in their activities. Similar to
51
52 our claims regarding the occurrence of acquisitions, we argue that organizations with high levels
53
54 of slack should prefer to engage in related acquisitions, given the security margin provided by
55
56 unused resources. More vulnerable family firms, with lower slack, would make more unrelated
57
58
59
60

1
2
3 acquisitions. Put differently, slack in combination with family control should thus strengthen the
4
5 preference for related targets.
6
7

8 *Hypothesis 5 (H5): As slack increases, family-controlled firms that decide to acquire*
9 *other firms are more likely to engage in related acquisitions than nonfamily firms.*
10

11 **DATA AND METHODS**

12

13 We draw on acquisition events by S&P1500 firms in the manufacturing sector (SIC codes
14 between 20 and 39) during the period from 1997 to 2011. In 1997, the Financial Accounting
15 Standards Board issued new reporting requirements under SFAS 131, which required firms to
16 report revenues and expenses in industry segments. This new requirement changed reporting on
17 firm diversification. As the relatedness of acquisitions is a key construct in the current study, to
18 derive consistent estimates in the reporting of segments by corporations, we focus on
19 acquisitions after 1997.
20
21
22
23
24
25
26
27
28
29

30 As services and utilities sectors are considerably different from manufacturing firms in
31 terms of operational and strategic goals, we focus only on manufacturing firms. We matched
32 firms with information in The Center for Research in Security Prices (CRSP), COMPUSTAT,
33 ExecuComp, Hoover's Company records, yearly proxy statements, and the Investor
34 Responsibility Research Center (IRRC). We required that at least five years of continuous
35 financial information be available in COMPUSTAT and that stock market trading data be
36 available for at least 100 days for five years. This led to a preliminary sample of 834 firms.
37
38
39
40
41
42
43
44
45
46

47 Next, we identified ownership information in the IRRC database, which also identifies
48 external institutional blockholders. We triangulated family member presence, including family
49 and founder CEOs, from Hoover's, ExecuComp, company proxy statements, annual reports
50 (particularly Item 404 or Regulation S-K), and Ancestry.com. Ownership information for a
51
52
53
54
55
56
57
58
59
60

1
2
3 minimum of five continuous years was unavailable for 142 firms, resulting in 692 firms (whereof
4
5 337 were family firms) representing 8,485 firm-year observations between 1997 and 2011.
6
7

8 Acquisition events during the period of observation are identified from Thomson SDC
9
10 Platinum. We define an acquisition event as the announcement date when an acquirer owning
11
12 less than a controlling stake of voting shares before the announcement date increases voting
13
14 share ownership to the level of controlling stake. We include only acquisitions that involve a
15
16 change of ownership and, thus, reflect major strategic decisions by the acquirer (Haleblian, Kim
17
18 & Rajagopalan, 2006).ⁱⁱⁱ This led to a preliminary sample of 1,262 acquisition events.
19
20
21

22 We applied several additional filters. First, the acquisition had to have been completed
23
24 by the end of 2011 (38 acquisitions dropped). Second, the transaction value had to exceed \$10
25
26 million and constitute at least 1 percent of the acquirer's market capitalization 21 days before the
27
28 announcement date (217 acquisitions dropped) (Asquith, Bruner & Mullins, 1983; Ushijima,
29
30 2010). Finally, we dropped another 140 acquisitions by excluding small and distressed
31
32 acquisitions in which the target's closing price 21 days before the announcement date was below
33
34 \$3 per share. Overall, 867 acquisition events were identified from 692 firms, representing 8,485
35
36 firm-year observations. Of the 692 firms in the sample, 337 were family firms who acquired 353
37
38 targets; the remaining 355 nonfamily firms acquired 514 targets.
39
40
41
42

43 **Dependent variables**

44
45
46 ***Likelihood of acquisition.*** Likelihood of acquisition is represented by time to acquisition
47
48 announcement, which is coded as 1 in the year of the event and 0 otherwise. Firms with more
49
50 than one acquisition announcement in a year are also coded as 1 for two reasons: (1) the
51
52 underlying rationale for acquisition activity according to our theory is the same, irrespective of
53
54 the number of acquired firms in a given year, and (2) coding single and multiple events as 1 is a
55
56
57
58
59
60

1
2
3 more conservative approach. A similar approach is used in Iyer and Miller (2008) when firms
4
5 make multiple acquisition announcement in a year.
6
7

8 ***Relatedness of acquisition.*** Following Wang and Zajac (2007), relatedness is
9
10 operationalized as follows: if the first four digits of the primary SIC codes of the target and
11
12 acquirer are the same, we code as 1; if only the first three digits are the same, we code as 0.75; if
13
14 only the first two digits match, we code as 0.5; if only the first digit is common, we code as 0.25;
15
16 otherwise, we code as 0. Increasing values thus indicate increasing relatedness. All the predictor
17
18 variables are lagged by one year.
19
20

21 22 **Independent variables** 23

24 ***Family control.*** Following other family business and SEW studies (Allen & Sharon,
25
26 1982; Anderson & Reeb, 2003; Berrone, Cruz, Gomez-Mejia & Larraza-Kintana, 2010;
27
28 Chrisman & Patel, 2012; Gomez-Mejia et al., 2010; Villalonga & Amit, 2006), we define family
29
30 control as a family that owns a minimum of 5 percent of firm shares with at least one family
31
32 member serving as a top-level executive or member of the board of directors. The variable is set
33
34 to 0 if family ownership is less than 5 percent and/or no family member is involved in executive
35
36 or board leadership; thus, the family control variable is truncated on the left. If ownership is
37
38 greater than 5 percent and at least one family member is involved in leadership, then the
39
40 percentage of family equity is coded as a continuous variable (Chrisman & Patel, 2012 and Patel
41
42 & Chrisman, 2013). In line with the aforementioned studies, we view family control as a useful
43
44 proxy for SEW. Indeed, control is an essential component of SEW, since control is what allows
45
46 owners to replace economic with socioemotional criteria (Zellweger et al., 2012). This measure
47
48 allows for a more conservative and nuanced assessment of family control in comparison to recent
49
50 work on family control and SEW concerns, which often use a binary variable to proxy family
51
52
53
54
55
56
57
58
59
60

1
2
3 control and hence the purported presence or absence of SEW concerns (e.g., Strike, Berrone,
4 Sapp & Congiu, 2015). Also, the 5 percent cutoff should be interpreted in light of a long stream
5
6 of research on the control of large publicly traded firms as well as SEC reporting requirements
7
8 that use a 5 percent ownership threshold as a conventional proxy for a principal's capacity to
9
10 exert major influence over the firm's affairs (e.g., Feldman, Amit & Villalonga, 2013; Hambrick
11
12 & Finkelstein, 1995; McEachern, 1975; Salancik & Pfeffer, 1980). Lastly, a recent study of the
13
14 entire population of Swedish firms by Gomez-Mejia *et al.* (2014) reveals that a continuous
15
16 family ownership measure correlates in the mid 0.90s with other indicators of family influence
17
18 such as the composition of the top management team, number of relatives working for the firm,
19
20 and intergenerational transitions. We further assess the degree to which the indicators of family
21
22 control load on a single factor. The correlation between the two items used to identify family
23
24 firms (level of control and whether at least one family member is in leadership) ranges from 0.47
25
26 to 0.59 ($p < 0.001$), and the mean correlation is 0.48.

27
28
29
30
31
32
33
34 ***Performance below aspiration level.*** We use return on assets (ROA) as a performance
35
36 benchmark. Following Iyer and Miller (2008), we construct two variables for performance below
37
38 aspiration levels, historical and social. If the difference is negative, we take the absolute value of
39
40 the difference in ROA; otherwise, the variable is set to 0. Performance below aspiration level
41
42 based on historic comparison is the decline in performance at t-1 relative to performance at t-2.
43
44 Performance below aspiration level based on social comparison is the relative discrepancy in
45
46 firm performance at t-1 relative to the performance of competitors at t-1 (Baum & Haveman,
47
48 1997; Greve, 1998). For the performance of competitors, we measure the median performance of
49
50 firms in the relevant three-digit SIC category in t-1.
51
52
53
54
55
56
57
58
59
60

1
2
3 **Slack.** We use three measures proposed by Bourgeois (1981) as proxies for slack
4 (Bromiley, 1991; Iyer & Miller, 2008): absorbed slack, unabsorbed slack, and potential slack.
5 Absorbed slack is the ratio of selling, general, and administrative expenses to sales; unabsorbed
6 slack is the ratio of current assets to current liabilities; potential slack is “ratio of debt to equity
7 as an inverse indicator” (Iyer & Miller, 2008, p. 813).
8
9

15 **Control variables**

16
17 For performance above aspiration levels relative to historic aspiration levels, if the
18 change in ROA from t-1 to t is positive, then we code the value of ROA change; otherwise, we
19 code it as 0. For performance above aspiration levels relative to social levels, if ROA is above
20 the median industry ROA, then we code the value of ROA change; otherwise, we code it as 0.
21 Altman’s Z-score represents distance from bankruptcy (Altman, 1968). As larger firms are more
22 likely to engage in acquisitions, we control for firm size as a natural logarithm of firm assets.
23 Following Iyer and Miller (2008), we control for R&D intensity ($\ln[\text{R\&D}]/\ln[\text{Sales}]$) and capital
24 intensity ($\ln[\text{capital expenditures}]/\ln[\text{Sales}]$). Because learning effects may impact acquisitions
25 (Haleblian et al., 2006), we control for the total number of prior acquisitions in the previous five
26 years of the respective acquisition (Barkema & Schijven, 2008a).
27
28
29
30
31
32
33
34
35
36
37
38
39

40 As CEO entrenchment could increase the likelihood of unrelated or fewer acquisitions
41 (Walters, Kroll & Wright, 2007), we control for CEO tenure as years with the firm. Furthermore,
42 as diversification level could affect the likelihood and type of acquisitions, we use a Herfindahl-
43 Hirschmann index of sales concentration in the top three segments of the COMPUSTAT files.
44 Because the firm’s ability to generate cash might affect acquisition decisions, we control for the
45 natural log of free cash flows. We also control for industry using industry dummies (reference
46 category: 39 -- Miscellaneous Manufacturing). Nonfamily blockholders are more likely to be
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 driven by financial motives alone (Thomsen & Pedersen, 2000). Drawing on Anderson and Reeb
4
5 (2003), we identify outside blockholders who control more than 5 percent of equity but are not
6
7 family members. Such owners have no relationship with the firm beyond equity ownership.
8
9

10 **Analytical approach**

11
12 We test H1, H2, and H3 using the likelihood of acquisition as the dependent variable and use
13
14 random-effects discrete-time logit regression with time-varying covariates (Table 2). To test
15
16 H4a, H4b, and H5, we use relatedness as the dependent variable (Table 3). As firms with
17
18 different first-digit SIC codes are coded 0, the values of relatedness are left-censored. Because
19
20 relatedness between acquirers and targets with similar four-digit SIC codes may not be fully
21
22 captured, relatedness on the right side could be censored as well. As the data consist of pooled
23
24 cross-sections, using panel specification for two-limit Tobit regressions is most appropriate.
25
26 Because the Hausman test was not significant after clustering for time and industry effects (Table
27
28 3: $p = 0.233$), we use a random-effects two-limit Tobit regression.
29
30
31
32
33

34 To test the degree of target relatedness, we control for self-selection. Acquisition
35
36 decisions could be driven by several observed and unobserved factors. Based on Lee, Maddala,
37
38 and Trost (1980), we apply a two-step Heckman self-selection model using ROA, distance from
39
40 bankruptcy, firm size, number of prior acquisitions, and four-digit SIC code (reference industry:
41
42 3999) in the first-step probit regression. The resulting inverse Mill's ratio (IMR) is used as a
43
44 control in the second step. Estimates of the second step appear in Tables 2 and 3.
45
46
47
48
49

50 **RESULTS**

51
52 Table 1 shows the means, standard deviations, and zero-order correlations. To limit effects of
53
54 collinearity, we centered continuous variables. Table 2 shows the results of random-effects
55
56
57
58
59
60

1
2
3 discrete-time logit regression to predict the likelihood of acquisition, and Table 3 presents the
4
5 results of random-effects two-limit Tobit regression that test for the relatedness of acquisitions.
6
7 We use a *robust* option in estimating both models.^{iv} For the two-limit Tobit model, the Durbin-
8
9 Watson test was inconclusive, indicating neither positive nor negative autocorrelation.
10
11 Inconclusive autocorrelation is expected, as acquisitions are not periodic and different
12
13 unobservable factors drive different acquisitions.^v To graphically interpret the hypotheses, we
14
15 draw on King, Tomz, and Wittenberg's (2000) approach in the *clarify* package (specifically
16
17 *estsimp* routine) by stimulating estimates from the random-effects discrete-time logit model.
18
19 Specifically, we identify marginal effects from the *mfx* command in Stata, and use these for
20
21 Monte Carlo simulation. Next, using Zelner's (2009) *intgph*, we plot the interactions in Figure 1.
22
23
24
25
26
27

28 -----
29 Insert Tables 1, 2, and 3 and Figure 1 about here
30 -----

31
32 H1 proposes that family control lowers the likelihood of acquisition. Models 3 and 8 of
33
34 Table 2 support this hypothesis (Historic aspiration: $\beta = -0.79, p < 0.05$; Social aspiration: $\beta = -$
35
36 $1.89, p < 0.01$). H2, which proposes that performance below aspiration level attenuates the lower
37
38 likelihood of acquisition under family control, is supported by Models 4 and 9 of Table 2
39
40 (Historic aspiration: $\beta = 0.68, p < 0.01$; Social aspiration: $\beta = 0.87, p < 0.05$). Figures 1(a) and
41
42 1(b) show that with performance falling below aspiration level, the probability of acquisition is
43
44 greater in family firms than in nonfamily firms. Figure 1(a) indicates that the probability of
45
46 acquisition under below-aspiration-level performance (historic) is stronger for family firms than
47
48 for nonfamily firms. Interestingly, the probability of acquisition decreases for nonfamily firms
49
50 facing increasing performance below aspiration level (social) while the relationship is positive
51
52 for family firms (Figure 1(b)). The results from the regression and from these additional tests
53
54 broadly support our reasoning, namely that family firms are more sensitive to the "fear factor" in
55
56
57
58
59
60

1
2
3 their business decisions and respond by putting a higher priority on sustaining economic wealth
4 (through acquisitions). In H3, we propose that slack strengthens the negative effect of family
5 control on the likelihood of acquisitions. Although the coefficient for absorbed slack multiplied
6 by the family control interaction is insignificant, coefficients for family control/unabsorbed slack
7 (Historic aspiration: $\beta = -0.13$, $p < 0.01$; Social aspiration: $\beta = -0.17$, $p < 0.05$) and family
8 control/potential slack (Historic aspiration: $\beta = -0.18$, $p < 0.05$; Social aspiration: $\beta = -0.22$, $p <$
9 0.01) are negative and significant (Models 5 and 10 in Table 2). Figures 1(c) and 1(d) indicate
10 that under increasing unabsorbed slack, family firms are less likely to acquire. Figures 1(e) and
11 1(f) show similar effects for increasing potential slack. This lends overall support for H3.

12
13
14
15
16
17
18
19
20
21
22
23
24
25 Table 3 displays the estimates for acquisition relatedness. H4a proposes that when
26 family-controlled firms decide to acquire they prefer related acquisitions, which finds strong
27 support (Historic aspiration: $\beta = 0.33$, $p < 0.001$; Social aspiration: $\beta = 0.41$, $p < 0.01$; Models 13
28 and 18). H4b suggests that for performance below aspiration level, family firms that decide to
29 acquire are less likely to engage in related diversification, which is supported for Historic
30 aspiration: $\beta = -0.32$, $p < 0.01$ and weakly supported for Social aspiration: $\beta = -0.19$, $p > 0.10$;
31 Models 14 and 19). Models 15 and 20 of Table 3 show that with increasing unabsorbed slack
32 (Historic aspiration: $\beta = 0.10$, $p < 0.05$; Social aspiration: $\beta = 0.09$, $p < 0.01$) and potential slack
33 (Historic aspiration: $\beta = 0.19$, $p < 0.01$; Social aspiration: $\beta = 0.22$, $p < 0.01$), family-controlled
34 firms tend to acquire more related targets, which lends overall support for H5.

47 48 **Robustness analyses**

49
50
51 *Performance above aspiration level.* We assess whether H3 and H5 are also supported
52 when performance above aspiration level is used as a predictor instead of slack (e.g. Chen &
53 Miller, 2007; Iyer & Miller, 2008). For performance above aspiration level based on historic
54
55
56
57
58
59
60

1
2
3 aspirations, if firm performance at $t-1$ is above ROA at $t-2$, we subtract firm ROA at $t-2$ from
4 firm ROA at $t-1$; otherwise, we code it as 0. For performance above aspiration level based on
5 firm ROA at $t-1$; otherwise, we code it as 0. For performance above aspiration level based on
6 social aspirations, if firm ROA at $t-1$ is above industry median ROA at $t-1$, we subtract industry
7 median ROA at $t-1$ from firm ROA at $t-1$. The estimates for performance above aspiration level
8 based on historic aspirations ($\beta = -0.24, p < 0.01$) and social aspirations ($\beta = -0.31, p < 0.01$) are
9 consistent with findings for both H3 and H5 (Historic aspiration: $\beta = 0.09, p < 0.05$; Social
10 aspiration: $\beta = 0.06, p < 0.05$).

11
12
13
14
15
16
17
18
19
20 ***Alternate definitions of family control.*** We further test the robustness of our findings
21 under alternate specifications of family control and family firms. We classify family firms into
22 three additional categories. The first consists of family-firm equity percentage when the founder
23 plays an active role in management or governance (*founder-led firm ownership*), which allows us
24 to control for the founder effect (Miller, Le Breton-Miller, Lester & Cannella, 2007). Second, we
25 use family-firm equity percentage when members of later family generations are involved in
26 management or governance (*later-generation controlled firm ownership*). These two measures
27 are truncated because all nonfamily firms are coded as 0 and the percentage of equity ownership
28 is coded for family firms. We also use a more conservative definition of family control by using
29 a continuous measure of ownership where the family owns at least 20 percent of the equity and
30 at least one family member is involved in the top management team or the board. Findings
31 remain consistent under these alternate specifications, and the results are available from authors
32 upon request. To further corroborate correlation among alternate measures of family control,
33 exploratory factor analysis with varimax rotation for the three alternate measures and the
34 measure in the main analysis leads to a single-factor explaining 74.55 percent of the variance.
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

In the horns of the dilemma: acquisitions in family firms -- Page 25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Alternate definitions of acquisition relatedness. Based on Miller *et al.* (2010), we use an additional operationalization of relatedness: the three-digit SIC code match (1 = related; 0 = unrelated). Findings are consistent, and the results are available from the authors upon request.

DISCUSSION

We set forth theory to argue that family control leads firms to consider two utility dimensions, namely financial wealth and SEW, in parallel. Financial wealth and SEW are non-fungible utility dimensions that often involve a trade-off. Family firms are thus caught in the dilemma about weighing the gains and losses from their strategic options in two non-fungible currencies, financial wealth and SEW, what we label the mixed gamble of family firm owners. The related decision dilemma should be particularly salient when assessing acquisitions. Family owners will then ask whether they should engage in acquisitions, and in particular unrelated ones, in the pursuit of future financial gains such as new revenue streams and lower risks, or whether they should refrain from acquisitions, in particular unrelated ones, to preserve current SEW. Under a behavioral decision frame that underlies our theorizing about how actors solve the mixed gamble (Wiseman, Cuevas-Rodrigues & Gomez-Mejia, 2012; Wiseman & Gomez-Mejia, 1998), family businesses are hesitant to acquire, particularly unrelated firms, because the hoped for financial gains are ultimately uncertain and the loss in SEW terms is certain. Thus if they acquire, family firms prefer related targets.

We also showed that the firm's vulnerability, which we proxy with performance below aspiration levels and/or low levels of slack, alters strategic preferences. Under low vulnerability, which can be seen as the default case, SEW and financial goals are at odds as drivers of strategic change. In absence of financial duress, family business owners should be risk averse and strongly

1
2
3 discount the uncertain upside tied to a strategic option, such as an (unrelated) acquisition, while
4
5 giving more emphasis to the protection of current endowments. Under vulnerability, however,
6
7 SEW and financial concerns are aligned as drivers of strategic change. This is because meeting
8
9 the firm's financial obligations is a condition sine qua non for family owners to enjoy SEW and
10
11 financial utilities. Integrating these arguments, SEW thus serves as a catalyst for strategic change
12
13 under vulnerability, while it serves as an impediment to strategic change under prosperity.
14
15

16
17 Our paper aims to make several contributions to the literature. By exploring preferences
18
19 for financial and socioemotional goals among family-controlled firms, we extend the literature
20
21 on the influence of ownership types on strategic actions to encompass acquisition research (e.g.,
22
23 Amihud & Lev, 1981; Connelly et al., 2010; David et al., 2010; Desender et al., 2013; Lane et
24
25 al., 1998; Ramaswamy et al., 2002; Thomsen & Pedersen, 2000). We thus follow the recent calls
26
27 to more fully consider governance effects and heterogeneous interests among owners, which
28
29 likely impact acquisition behavior (Haleblian et al., 2009). We show that social and affective
30
31 priorities in the form of SEW concerns among family firm owners alter acquisition activity,
32
33 which represents a new firm-level antecedent.
34
35
36
37

38
39 Also, for family business research we reconcile the seemingly opposed arguments of
40
41 Miller and colleagues (2010), who find that if family firms acquire they prefer to diversify, and
42
43 those of Gomez-Mejia and colleagues (2010) and Anderson and Reeb (2003), who find a general
44
45 preference for lower diversification among family firms. With our study we extend the work by
46
47 Miller et al. (2010) and explore the occurrence of acquisitions just as the contingent effect of
48
49 vulnerability. In contrast to Miller and colleagues (2010), but in line with our theorizing, we find
50
51 that when a family firm does decide to acquire, it more likely opts for a related firm.
52
53
54
55
56
57
58
59
60

1
2
3 Our theorizing about strategic choices in family firms as a dilemma combines the
4 inconsistent conceptualizations on the impact of nonfinancial goals on strategic actions in family
5 firms. Previous studies have stressed either the predominance of SEW considerations (Gomez-
6 Mejia et al., 2007), the contingent effect of performance hazard (Gomez-Mejia et al., 2010), or
7 the alignment of family and business goals (Chrisman & Patel, 2012). Our dilemma perspective
8 integrates these dispersed effects suggesting that family firms will assess the likely upside and
9 downside of their strategic choices in both financial and socioemotional terms. This view builds
10 on the burgeoning insight that firms generally make decisions under uncertainty, considering
11 both positive and negative potential outcomes, what Bromiley (2009, 2010) referred to as mixed
12 gambles. We extend the uni-dimensional view of mixed gambles, in which firms either win or
13 lose in only one currency (i.e., money), to a decision context where strategic actions are assessed
14 in terms of gains and losses along two non-fungible SEW and financial utility dimensions.
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

32 To see strategic decision-making in family-controlled firms as a decision dilemma
33 speaks to Gavetti, Levinthal, and Ocasio (2007), who remind us that the idea of “conflicting
34 interests” has been lost in theory building (527–528). We show that even within a dominant
35 coalition (eventually even with the dominant family principal), tension and bargaining exist
36 among competing goals and performance indicators, with the attention focus and preferences
37 changing depending on circumstances (Audia & Brion, 2007; Nordqvist & Melin, 2010). In the
38 end, the outlined decision dilemma represents a difficult choice about whether to adhere to a
39 “family first” or a “business first” decision frame.
40
41
42
43
44
45
46
47
48
49
50

51 In addition, we introduce the notion of vulnerability, proxied by below aspiration-level
52 performance and/or the absence of slack, which has a decisive impact on how actors solve the
53 decision dilemma. Under vulnerability, SEW and financial concerns are aligned as drivers of
54
55
56
57
58
59
60

1
2
3 acquisitions. This is because meeting the firm's financial obligations is a necessary condition for
4
5 the family owners to enjoy any SEW and financial utility.
6
7

8 Including slack as a sign of vulnerability speaks to the behavioral theory of the firm by
9
10 supporting the argument that behavioral rationales attributable to owners can explain corporate-
11
12 level phenomena (Audia & Greve, 2006; Cyert & March, 1963). Inconsistent with orthodox
13
14 contentions of behavioral theory on slack search (Levinthal & March, 1981), we find that family
15
16 owners consider slack more as a cushion against performance hazard—which enables further
17
18 pursuit of SEW goals—and less as leeway to experiment with the pursuit of financial wealth.
19
20
21

22 **Implications for further research**

23

24 Our paper introduces the notion of a dilemma to strategic decisions made by family-controlled
25
26 firms trying to balance the pursuit of multiple utilities that are not fully fungible or
27
28 interchangeable and not easily mapped along a uni-dimensional utility continuum. While others
29
30 have recently applied the intriguing perspective of a “mixed gamble” (where both positive and
31
32 negative outcomes are possible) to the case of executive compensation (Martin et al., 2013) and
33
34 resource allocation in multi-unit firms (Arrfelt et al., 2013), more needs to be understood about
35
36 how firms deal with decisions that imply losses and gains in parallel, eventually in goal
37
38 dimensions with utilities that are not fully fungible.
39
40
41
42

43 Our study also speaks to Graebner and Eisenhardt (2004), who frame acquisitions as
44
45 courtship, and hence as a social exchange between buyer and seller that is shaped by
46
47 considerations of long-term fit and not only price. For our own study, this means that when there
48
49 is an affective fit between buyer and seller (e.g., between two families who know and appreciate
50
51 each other), family firms may be more likely to acquire, as they have lower fears of losing SEW.
52
53 It is also possible for an acquisition to be a “pet” project that increases SEW. For instance, a
54
55
56
57
58
59
60

1
2
3 family may buy a firm to strengthen its family reputation (Graebner & Eisenhardt, 2004).
4
5 However, this is unlikely to be a prominent case among publicly quoted family firms. If such an
6
7 acquisition occurs, the family would most likely control it as a private investment. Still, this may
8
9 be an interesting avenue for future research.
10
11

12
13 Even though we do not test for performance impact, socioemotional and financial goals
14
15 may be mutually supportive. Building on the emerging literature about synergies in paradoxes
16
17 (Farjoun, 2010; Lewis, 2000), such as change enabled by routines (Feldman & Pentland, 2003),
18
19 investigating the tentative arguments about the synergistic effects between SEW and financial
20
21 wealth seems promising (Stewart & Hitt, 2010; Zellweger & Nason, 2008). Given the prevalence
22
23 of family firms and the undiversified wealth positions of their owners, it is unlikely that families
24
25 systematically undermine the financial performance of their firms in the pursuit of SEW. Some
26
27 family firms may have found ways to combine the competing worlds. Our theorizing may be
28
29 useful in moving towards such a positive theory of SEW (Schulze & Kellermanns, 2015).
30
31 Generally speaking, to move in this direction would require a fine-grained analysis about the
32
33 tradeoffs and potential synergies between SEW and performance. Such theoretical progress
34
35 should benefit from our insights about the mixed gamble as it will help researchers tease apart
36
37 the conditions and strategic processes that result in a gain-gain, gain-loss, loss-gain, and loss-loss
38
39 situation in terms of relative changes in financial wealth and SEW.
40
41
42
43
44

45
46 Revisiting the role of prosperity and slack as drivers respectively impediments of
47
48 change seems to be another avenue for future research. Our argument about the role of slack as a
49
50 cushion that reduces vulnerability and the need for adaptation resonates with the idea of
51
52 complacency and inertia (Arrfelt et al., 2013; Kraatz & Zajac, 2001; Sitkin, 1992). These
53
54 arguments are supported by the results from our alternate framing of prosperity, performance
55
56
57
58
59
60

1
2
3 above aspiration levels, a test recently called for by Schulze and Kellermanns (2015). Prosperity
4 more broadly, and not only slack resources, is to be seen as a safety cushion necessary to absorb
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

above aspiration levels, a test recently called for by Schulze and Kellermanns (2015). Prosperity more broadly, and not only slack resources, is to be seen as a safety cushion necessary to absorb uncertainties in the mixed gamble, which challenges orthodox arguments of behavioral theory on slack search (Levinthal & March, 1981). This area is ripe for further research.

The main limitation of this study is its exclusive reliance on archival proxies. Because we use a rather crude measure for SEW, we are unable to directly investigate the sources of SEW biases, such as the enjoyment of control, binding ties, dynastic succession, identification with the firm, and emotional attachment (Gomez-Mejia et al., 2011). Nevertheless, our measure of family control is superior to studies that examine only family ownership (Anderson & Reeb, 2003; Berrone et al., 2010) in that it captures both family ownership and family involvement. As evidenced by our robustness test, results are stable when using alternate family firm definitions. Some of our arguments may be even more applicable in the context of private firms. But our study follows a long tradition in the finance and strategy literature to assign particular preferences to various types of controlling owners of publicly quoted firms, sometimes at starting levels of ownership of as low as 5% (Chrisman & Patel, 2012; Claessens, Djankov, Fan & Lang, 2002; Faccio & Lang, 2002; Kroll, Simmons & Wright, 1990; La Porta, Lopez De Silanes & Shleifer, 1999; Thomsen & Pedersen, 2000; Wright, Kroll, Lado & Van Ness, 2002). Also, our results hold at various ownership threshold levels. The strong empirical evidence that we find for our theories, even in the context of publicly quoted firms in the United States, should thus provide a conservative test of our contentions. Furthermore, performance feedback and acquisitions are possibly endogenous (Rumelt, 1974), and endogeneity could also stem from measurement errors related to the effects of family ownership on other predictors (e.g., family ownership could affect the level of slack). We acknowledge that the findings imply correlation

1
2
3 but not causation. A complex set of instrumental variables must be used to parse out endogeneity
4
5 between slack and performance outcomes and the joint effects of these outcomes on acquisitions
6
7 and related acquisitions. While autocorrelation may not directly address the endogeneity issue, it
8
9 is further complicated by the interaction terms (Semadeni, Withers & Trevis Certo, 2014)^{vi}.
10
11

12
13 The institutional context of our study, U.S. public firms, represents a boundary
14
15 condition for our reasoning. In emerging countries family firms have been found to perform
16
17 particularly well, and often operate as diversified conglomerates to fill institutional voids (Luo &
18
19 Chung, 2005; Peng & Jiang, 2010). In such contexts (diversifying) acquisitions may have less
20
21 uncertainty and more favorable financial outcomes, which would increase the occurrence and the
22
23 unrelatedness of acquisitions by family firms. Finally, while manufacturing companies represent
24
25 an ideal context to study our arguments, the generalizability of our findings may be limited to
26
27 this particular setting and less so to other industries. Particularly, the measures of slack are more
28
29 relevant to manufacturing firms than with service firms.
30
31
32

33 34 **Conclusion**

35
36 In their strategizing family firms often face a dilemma of maintaining current SEW versus
37
38 pursuing prospective financial wealth; this requires an approach that bridges the dialectic
39
40 between socioemotional and financial goals and explores how actors deal with the competing
41
42 logics of “money” and “heart” in tandem. Our study thus addresses one of the fundamental
43
44 challenges in family firms, with wide practical relevance and a potential broader application to
45
46 organizations that consider more than a single utility dimension.
47
48
49
50
51
52
53
54
55
56
57
58
59
60

REFERENCES

- 1
2
3
4
5
6 Allen, M. P., & Sharon, K. P. 1982. Power, Performance, and Succession in the Large
7 Corporation. *Administrative Science Quarterly*, 27: 538-547.
8
9
10 Altman, E. I. 1968. Financial Ratios, Discriminant Analysis and the Prediction of Corporate
11 Bankruptcy. *Journal of Finance*, 23: 20.
12
13
14 Amihud, Y., & Lev, B. 1981. Risk reduction as a managerial motive for conglomerate mergers.
15
16
17 *Bell Journal of Economics*, 12: 605-617.
18
19
20 Anderson, R., & Reeb, D. 2003. Founding-family ownership, corporate diversification, and firm
21 leverage. *Journal of Law and Economics*, 46: 653-684.
22
23
24 Argote, L., & Greve, H. R. 2007. A Behavioral Theory of the Firm--40 Years and Counting:
25 Introduction and Impact. *Organization Science*, 18: 337-349.
26
27
28 Arrfelt, M., Wiseman, R. M., & Hult, G. T. M. 2013. Looking backward instead of forward:
29 Aspiration-driven influences on the efficiency of the capital allocation process. *Academy of*
30
31
32 *Management Journal*, 56: 1081-1103.
33
34
35 Asquith, P., Bruner, R. F., & Mullins, D. W. 1983. The gains to bidding firms from merger.
36
37
38 *Journal of Financial Economics*, 11: 121-139.
39
40
41 Audia, P. G., & Brion, S. 2007. Reluctant to change: Self-enhancing responses to diverging
42 performance measures. *Organizational Behavior and Human Decision Processes*, 102: 255–
43
44
45 269.
46
47
48 Audia, P. G., & Greve, H. R. 2006. Less Likely to Fail: Low Performance, Firm Size, and
49
50
51 Factory Expansion in the Shipbuilding Industry. *Management Science*, 52: 11.
52
53
54 Barkema, H. G., & Schijven, M. 2008a. How Do Firms Learn to Make Acquisitions? A Review
55 of Past Research and an Agenda for the Future. *Journal of Management*, 34: 594-634.
56
57
58
59
60

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
- Barkema, H. G., & Schijven, M. 2008b. Toward unlocking the full potential of acquisitions: The role of organizational restructuring. *Academy of Management Journal*, 51: 696-722.
- Baum, J., & Haveman, H. A. 1997. Love thy neighbor? Differentiation and agglomeration in the Manhattan hotel industry, 1898-1990. *Administrative Science Quarterly*, 42: 304-338.
- Berger, P. G., & Ofek, E. 1996. Bustuop takeovers of value-destroying diversified firms. *Journal of Finance*, 51: 1175-1200.
- Bergh, D. D., & Gibbons, P. 2011. The Stock Market Reaction to the Hiring of Management Consultants: A Signalling Theory Approach. *Journal of Management Studies*, 48: 544-567.
- Berrone, P., Cruz, C., Gomez-Mejia, L. R., & Larraza-Kintana, M. 2010. Socioemotional Wealth and Corporate Responses to Institutional Pressures: Do Family-Controlled Firms Pollute Less? *Administrative Science Quarterly*, 55: 82-113.
- Berrone, P., Cruz, C. C., & Gomez-Mejia, L. R. 2012. Socioemotional Wealth in Family Firms: A Review and Agenda for Future Research. *Family Business Review*, 25: 258-279.
- Bourgeois, L. J. 1981. On the Measurement of Organizational Slack. *Academy of Management Review*, 6: 29-39.
- Bromiley, P. 1991. Testing a causal model of corporate risk-taking and performance. *Academy of Management Journal*, 34: 37-59.
- Bromiley, P. 2009. A prospect theory model of resource allocation. *Decision Analysis*, 6: 1-15.
- Bromiley, P. 2010. Looking at Prospect Theory. *Strategic Management Journal*, 31: 1357-1370.
- Campa, J. M., & Kedia, S. 2002. Explaining the diversification discount. *Journal of Finance*, 57: 1731-1762.

- 1
2
3 Capron, L., Dussauge, P., & Mitchell, W. 1998. Resource redeployment following horizontal
4 acquisitions in Europe and North America, 1988–1992. *Strategic Management Journal*, 19:
5 631-661.
6
7
8
9
10 Capron, L., & Pistre, N. 2002. When do acquirers earn abnormal returns? *Strategic Management*
11 *Journal*, 23: 781-794.
12
13
14
15 Chatterjee, A., & Hambrick, D. 2007. It's All about Me: Narcissistic CEOs and Their Effects on
16 Company Strategy and Performance. *Administrative Science Quarterly*, 52: 351-386.
17
18
19
20 Chen, W. R. 2008. Determinants of firms' backward-and forward-looking R&D search behavior.
21 *Organization Science*, 19: 609-622.
22
23
24
25 Chen, W. R., & Miller, K. D. 2007. Situational and institutional determinants of firms' R&D
26 search intensity. *Strategic Management Journal*, 28: 369-381.
27
28
29
30 Chrisman, J., & Patel, P. 2012. Variations in R&D Investments of Family and Nonfamily Firms:
31 Behavioral Agency and Myopic Loss Aversion Perspectives. *Academy of Management*
32 *Journal*, 55: 976-997.
33
34
35
36 Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P. 2002. Disentangling the Incentive and
37 Entrenchment Effects of large Shareholdings. *Journal of Finance*, LVII: 2741-2771.
38
39
40
41 Combs, J. G., Penney, C. R., Crook, T. R., & Short, J. C. 2010. The impact of family
42 representation on CEO compensation. *Entrepreneurship Theory and Practice*, 34: 1125-1144.
43
44
45
46 Connelly, B. L., Hoskisson, R. E., Tihanyi, L., & Certo, S. T. 2010. Ownership as a Form of
47 Corporate Governance. *Journal of Management Studies*, 47: 1561-1589.
48
49
50
51 Cruz, C. C., Gomez-Mejia, L. R., & Becerra, M. 2010. Perceptions of Benevolence and the
52 Design of Agency Contracts: CEO-TMT Relationships in Family Firms. *Academy of*
53 *Management Journal*, 53: 69-89.
54
55
56
57
58
59
60

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
- Cyert, R. M., & March, J. G. 1963. *A Behavioral Theory of the Firm* (1 ed.). Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- David, P., O'Brien, J. P., Yoshikawa, T., & Delios, A. 2010. Do Shareholders or Stakeholders Appropriate the Rents from Corporate Diversification? The Influence of Ownership Structure. *Academy of Management Journal*, 53: 636-654.
- Deepphouse, D. L., & Jaskiewicz, P. 2013. Do family firms have better reputations than non-family firms? An integration of socioemotional wealth and social identity theories. *Journal of Management Studies*, 50: 337-360.
- Dennis, D. J., Dennis, D. K., & Sarin, A. 1997. Agency problems, equity ownership and corporate diversification. *Journal of Finance*, 52: 135-160.
- Desender, K. A., Aguilera, R., Crespi, R., & Garcia-Cestona, M. 2013. When does ownership matter? Board characteristics and behavior. *Strategic Management Journal*, 34: 823-842.
- Deutsch, Y., Keil, T., & Laamanen, T. 2007. Decision-making in acquisitions: The effect of outside directors' compensation on acquisition patterns. *Journal of Management*, 33: 30-56.
- Dreux, D. R. 1990. Financing family business: Alternatives to selling out or going public. *Family Business Review*, 3(3): 225-243.
- Duran, P., Kammerlander, N., Van Essen, M., & Zellweger, T. M. 2015. Doing more with less - innovation input and output in family firms. *Academy of Management Journal*, forthcoming.
- Eisenmann, T. 2002. The effects of CEO equity ownership and firm diversification on risk taking. *Strategic Management Journal*, 23: 513-534.
- Faccio, M., & Lang, L. H. P. 2002. The ultimate ownership of Western European corporations. *Journal of Financial Economics*, 65: 365-395.

- 1
2
3 Farjoun, M. 2010. Beyond dualism: Stability and change as a duality. *Academy of Management*
4
5 *Review*, 35: 202–225.
6
7
8 Feldman, E., Amit, R., & Villalonga, B. 2013. Corporate Divestitures and Family Control.
9
10 *Working Paper, The Wharton School*: University of Pennsylvania.
11
12
13 Feldman, M. S., & Pentland, B. T. 2003. Reconceptualizing organizational routines as a source
14
15 of flexibility and change. *Administrative Science Quarterly*, 48: 94–118.
16
17
18 Finkelstein, S. 1992. Power in Top Management Teams - Dimensions, Measurement, and
19
20 Validation. *Academy of Management Journal*, 35: 505-538.
21
22
23 Friedland, R., Palmer, D., & Stenbeck, M. 1990. The geography of corporate production.
24
25 *Sociological Forum*, 5: 335–359.
26
27
28 Gavetti, G., Levinthal, D., & Ocasio, W. 2007. Neo-Carnegie: The Carnegie School's Past,
29
30 Present, and Reconstructing for the Future. *Organization Science*, 18: 523-536.
31
32
33 Gigerenzer, G., & Todd, P. M. 1999. *Simple heuristics that make us smart*. New York: Oxford
34
35 University Press.
36
37
38 Gomez-Mejia, L. R., Chirico, F., Nordqvist, M., & Hellerstedt, K. 2014. Persistence under
39
40 financial distress: Socioemotional wealth and business exit decisions by family controlled
41
42 firms. Notre Dame, Ind.: University of Notre Dame.
43
44
45 Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. 2011. The Bind that Ties:
46
47 Socioemotional Wealth Preservation in Family Firms. *Academy of Management Annals*, 5:
48
49 653-707.
50
51
52 Gomez-Mejia, L. R., Haynes, K. T., Nunez-Nickel, M., Jacobson, K. J. L., & Moyano-Fuentes, J.
53
54 2007. Socioemotional Wealth and Business Risks in Family-controlled Firms: Evidence from
55
56 Spanish Olive Oil Mills. *Administrative Science Quarterly*, 52: 106-137.
57
58
59
60

- 1
2
3 Gomez-Mejia, L. R., Makri, M., & Larraza-Kintana, M. 2010. Diversification Decisions in
4
5 Family-Controlled Firms. *Journal of Management Studies*, 47: 223-252.
6
7
8 Gomez-Mejia, L. R., Campbell, J. T., Martin, G., Hoskisson, R. E., Makri, M., & Sirmon, D. G.
9
10 2014. Socioemotional wealth as a mixed gamble: Revisiting family firm R&D investments
11
12 with the behavioral agency model. *Entrepreneurship Theory and Practice*, 38: 1351-1374.
13
14
15 Graebner, M. E., & Eisenhardt, K. M. 2004. The seller's side of the story: Acquisition as
16
17 courtship and governance as syndicate in entrepreneurial firms. *Administrative Science*
18
19 *Quarterly*, 49: 366-403.
20
21
22 Graham, J. R., Lemmon, M., & Wolf, J. 2002. Does corporate diversification destroy value?
23
24 *Journal of Finance*, 57: 695-720.
25
26
27 Greve, H. R. 1998. Performance, Aspirations, and Risky Organizational Change. *Administrative*
28
29 *Science Quarterly*, 43: 58-86.
30
31
32 Haleblian, J., Devers, C. E., McNamara, G., Carpenter, M. A., & Davison, R. B. 2009. Taking
33
34 Stock of What We Know About Mergers and Acquisitions: A Review and Research Agenda.
35
36 *Journal of Management*, 35: 469-502.
37
38
39 Haleblian, J. J., Kim, J. Y. J., & Rajagopalan, N. 2006. The influence of acquisition experience
40
41 and performance on acquisition behavior: Evidence from the US commercial banking
42
43 industry. *Academy of Management Journal*, 49: 357-370.
44
45
46 Hambrick, D. C., & Finkelstein, S. 1995. The effects of ownership structure on conditions at the
47
48 top: The case of CEO pay raises. *Strategic Management Journal*, 16: 175-193.
49
50
51 Hayward, M. 2002. When do firms learn from their acquisition experience? Evidence from
52
53 1990-1995. *Strategic Management Journal*, 23: 21-39.
54
55
56
57
58
59
60

- 1
2
3 Hitt, M. A., Harrison, J. S., & Ireland, R. D. 2001. *Mergers and acquisitions: A guide to creating*
4
5 *value for stakeholders*. New York: Oxford University Press.
6
7
8 Hitt, M. A., Hoskisson, R. E., & Ireland, R. D. 1994. A mid-range theory of the interactive
9
10 effects of international and product innovation on innovation and performance. *20*: 297-326.
11
12 Iyer, D. N., & Miller, K. D. 2008. Performance Feedback, Slack, and the Timing of Acquisitions.
13
14 *Academy of Management Journal*, 51: 808-822.
15
16
17 King, D. R., Dalton, D. R., Daily, C. M., & Covin, J. G. 2004. Meta-analyses of post-acquisition
18
19 performance: indications of unidentified moderators. *Strategic Management Journal*, 25: 187-
20
21 200.
22
23
24 King, D. R., Slotegraaf, R. J., & Kesner, I. 2008. Performance implications of firm resource
25
26 interactions in the acquisition of R&D-intensive firms. *Organization Science*, 19: 327-340.
27
28
29 King, G., Tomz, M., & Wittenberg, J. 2000. Making the Most of Statistical Analyses: Improving
30
31 Interpretation and Presentation. *American Journal of Political Science*, 44: 347-361.
32
33
34 Kraatz, M. S., & Zajac, E. J. 2001. How organizational resources affect strategic change and
35
36 performance in turbulent environments: Theory and evidence. *Organization Science*, 12: 632-
37
38 657.
39
40
41 Kroll, M., Simmons, S. A., & Wright, P. 1990. Determinants of chief executive officer
42
43 compensation following major acquisitions. *Journal of Business Research*, 20: 349-366.
44
45
46 La Porta, R., Lopez De Silanes, F., & Shleifer, A. 1999. Corporate Ownership around the World.
47
48 *Journal of Finance*, 54: 471-517.
49
50
51 Lane, P., Cannella, A., & Lubatkin, M. 1998. Agency problems as antecedents to unrelated
52
53 mergers and diversification: Amihud and Lev reconsidered. *Strategic Management Journal*,
54
55 19: 555-578.
56
57
58
59
60

- 1
2
3 Lang, L. H. P., & Stulz, R. 1994. Tobin's Q, corporate diversification, and firm performance.
4
5 *Journal of Political Economy*, 102: 1248-1280.
6
7
8 Lee, L. F., Maddala, G. S., & Trost, R. P. 1980. Asymptotic covariance matrices of two-stage
9
10 probit and two-stage tobit methods for simultaneous equations models with selectivity.
11
12 *Econometrica*, 48: 491-503.
13
14
15 Leitterstorf, M. P., & Rau, S. B. 2014. Socioemotional wealth and IPO underpricing of family
16
17 firms. *Strategic Management Journal*, 35: 751-760.
18
19
20 Levinthal, D., & March, J. G. 1981. A model of adaptive organizational search. *Journal of*
21
22 *Economic Behavior and Organizations*, 2: 307-333.
23
24
25 Lewis, M. 2000. Exploring paradox: Toward a more comprehensive guide. *Academy of*
26
27 *Management Review*, 25: 760-776.
28
29
30 Luo, X., & Chung, C. N. 2005. Keeping it all in the Family: The Role of Particularistic
31
32 Relationships in Business Group Performance during Institutional Transition. *Administrative*
33
34 *Science Quarterly*, 50: 404-439.
35
36
37 MacCrimmon, K. R., & Wehrung, D. A. 1990. Characteristics of risk taking executives.
38
39 *Management Science*, 36: 422-435.
40
41
42 March, J. G., & Shapira, Z. 1987. Managerial Perspective on Risk and Risk Taking. *Management*
43
44 *Science*, 33: 1404-1418.
45
46
47 Martin, G., Wiseman, R., & Gomez-Mejia, L. R. 2013. Stock options as a mixed gamble:
48
49 Revisiting the behavioral agency model. *Academy of Management Journal*, 56: 451-472.
50
51
52 Masulis, R., Wang, C., & Xie, F. 2007. Corporate governance and acquirer returns. *Journal of*
53
54 *Finance*, 62: 1851-1889.
55
56
57 McEachern, W. A. 1975. *Managerial control and performance*. Lexington, Mass.: D.C. Heath.
58
59
60

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
- McNamara, G. M., Haleblian, J., & Dykes, B. J. 2008. The performance implications of participating in an acquisition wave: Early mover advantages, bandwagon effects, and the moderating influence of industry characteristics and acquirer tactics. *Academy of Management Journal*, 51: 113-130.
- Miller, D., Le Breton-Miller, I., & Lester, R. H. 2010. Family ownership and acquisition behavior in publicly traded companies. *Strategic Management Journal*, 31(2): 201 - 223.
- Miller, D., Le Breton-Miller, I., Lester, R. H., & Cannella, A. A. 2007. Are family firms really superior performers? *Journal of Corporate Finance*, 13: 829–858.
- Morck, R., & Yeung, B. 2003. Agency Problems in Large Family Business Groups. *Entrepreneurship Theory & Practice*, 27: 367-382.
- Morck, R. K., Wolfenzon, D., & Yeung, B. 2005. Corporate governance, economic entrenchment, and growth. *Journal of Economic Literature*, 43: 655–720.
- Nordqvist, M., & Melin, L. 2010. Entrepreneurial Families and Family Firms. *Entrepreneurship & Regional Development*, 22: 1-29.
- Patel, P. C., & Chrisman, J. J. 2014. Risk abatement as a strategy for R&D investments in family firms. *Strategic Management Journal*, 35: 617-627.
- Peng, M. W., & Jiang, Y. 2010. Institutions behind family ownership and control in large firms. *Journal of Management Studies*, 47: 253–273.
- Pratt, M. G., & Foreman, P. O. 2000. Classifying managerial responses to multiple organizational identities. *Academy of Management Review*, 25: 18-42.
- Ramaswamy, K., Li, M., & Veliyath, R. 2002. Variations in ownership behavior and propensity to diversify: A study of the Indian corporate context. *Strategic Management Journal*, 23: 345-358.

- 1
2
3 Rhodes-Kropf, M., Robinson, D. T., & Viswanathan, S. 2005. Valuation waves and merger
4 activity: The empirical evidence. *Journal of Financial Economics*, 77: 561–603.
5
6
7
8 Rumelt, R. D. 1974. Strategy, structure, and economic performance. *Harvard Business School*,
9
10 *Division of Research*.
11
12 Salancik, G. R., & Pfeffer, J. 1980. Effects of ownership and performance on executive tenure in
13 U.S. corporations. *Academy of Management Journal*, 23: 653-664.
14
15
16
17 Schulze, W. S., & Kellermanns, F. W. 2015. Reifying Socioemotional Wealth. *Entrepreneurship*
18 *Theory and Practice*, 39: 447-459.
19
20
21
22 Semadeni, M., Withers, M. C., & Trevis Certo, S. 2014. The perils of endogeneity and
23 instrumental variables in strategy research: Understanding through simulations. *Strategic*
24 *Management Journal*, 35: 1070-1079.
25
26
27
28
29 Servaes, H. 1996. The value of diversification during the conglomerate merger wave. *Journal of*
30 *Finance*, 51: 1201-1225.
31
32
33
34 Shimizu, K. 2007. Prospect Theory, Behavioral Theory, and the Threat-Rigidity Thesis:
35 Combinative Effects on Organizational Decisions to Divest Formerly Acquired Units.
36 *Academy of Management Journal*, 50: 1495-1514.
37
38
39
40
41 Shleifer, A., & Vishny, R. 1986. Large shareholders and corporate control. *Journal of Political*
42 *Economy*, 94: 461-488.
43
44
45
46 Sitkin, S. B. 1992. Learning through failure: the strategy of small losses. *Research in*
47 *Organizational Behavior*, 14: 231-266.
48
49
50
51 Stewart, A., & Hitt, M. A. 2010. The Yin and Yang of Kinship and Business: Complementary or
52 Contradictory Forces? (And can we really say?). *Advances in Entrepreneurship, Firm*
53 *Emergence and Growth*, 12: 243-276.
54
55
56
57
58
59
60

- 1
2
3 Strike, V. M., Berrone, P., Sapp, S. G., & Congiu, L. 2015. A socioemotional wealth approach to
4 CEO career horizons in family firms. *Journal of Management Studies*, 52: 555-583.
5
6
7
8 Thomsen, S., & Pedersen, T. 2000. Ownership structure and economic performance in the largest
9 European companies. *Strategic Management Journal*, 21: 689.
10
11
12 Trautwein, F. 1990. Merger Motives and Prescriptions. *Strategic Management Journal*, 11: 283-
13 295.
14
15
16
17 Uhlenbruck, K., Hitt, M. A., & Semadeni, M. 2006. Market value effects of acquisitions
18 involving Internet firms: A resource-based analysis. *Strategic Management Journal*, 27: 899-
19 913.
20
21
22
23
24 Ushijima, T. 2010. Understanding partial mergers in Japan. *Journal of Banking & Finance*, 34:
25 2941-2953.
26
27
28
29 Vermeulen, F., & Barkema, H. 2001. Learning through acquisitions. *Academy of Management*
30 *Journal*, 44: 457-476.
31
32
33
34 Villalonga, B. 2004. Diversification discount or premium? New evidence from the business
35 information tracking series. *Journal of Finance*, 59: 479-506.
36
37
38
39 Villalonga, B., & Amit, R. 2006. How do family ownership, control and management affect firm
40 value? *Journal of Financial Economics*, 80: 385-417.
41
42
43
44 Walters, B. A., Kroll, M. J., & Wright, P. 2007. CEO tenure, boards of directors, and acquisition
45 performance. *Journal of Business Research*, 60: 331-338.
46
47
48
49 Wang, L., & Zajac, E. J. 2007. Alliance or acquisition? a dyadic perspective on interfirm
50 resource combinations. *Strategic Management Journal*, 28: 1291.
51
52
53
54 Wiseman, R. M., Cuevas-Rodrigues, G., & Gomez-Mejia, L. 2012. Toward a social theory of
55 agency. *Journal of Management Studies*, 49: 202-222.
56
57
58
59
60

- 1
2
3 Wiseman, R. M., & Gomez-Mejia, L. R. 1998. A Behavioral Agency Model of Managerial Risk
4 Taking. *Academy of Management Review*, 23: 133-153.
5
6
7
8 Wright, P., Kroll, M., Lado, A., & Van Ness, B. 2002. The structure of ownership and corporate
9 acquisition strategies. *Strategic Management Journal*, 23: 41-55.
10
11
12 Wu, G., & Markle, A. B. 2008. An Empirical Test of Gain-Loss Separability in Prospect Theory.
13
14
15
16
17 Zellweger, T., Kellermanns, F., Chrisman, J., & Chua, J. 2012. Family Control and Family Firm
18 Valuation by Family CEOs: The Importance of Intentions for transgenerational Control.
19
20
21
22
23
24
25 Zellweger, T. M., & Nason, R. S. 2008. A Stakeholder Perspective on Family Firm Performance.
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
- Toward a Combined Agency–Resource Dependence Perspective. *Journal of Management*:
0149206315579512.

Table 1. Means, standard deviations, and correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Family Control	0.21	0.16	1																	
2. (Performance – aspiration level) _{t-1} , historical <0	0.07	0.13	.13	1																
3. (Performance – aspiration level) _{t-1} , historical >0	0.09	0.08	.05	-.62	1															
4. (Performance – aspiration level) _{t-1} , social <0	0.06	0.10	.13	.68	-.67	1														
5. (Performance – aspiration level) _{t-1} , social >0	0.09	0.07	.08	-.75	.76	-.77	1													
6. Absorbed Slack _{t-1}	0.62	1.28	.14	-.30	.18	-.32	.15	1												
7. Unabsorbed Slack _{t-1}	2.25	1.74	.14	-.38	.20	-.22	.15	.37	1											
8. Potential Slack _{t-1}	0.92	4.06	-.18	-.28	.22	-.17	.25	.47	.36	1										
9. Distance from Bankruptcy _{t-1}	3.75	9.35	-.12	-.26	.41	-.16	.37	.10	.18	.31	1									
10. Size [ln[Assets] _{t-1} [ln(assets in millions)]	6.35	7.78	.15	.07	.14	.08	.09	.16	.10	.15	.25	1								
11. R&D Intensity _{t-1}	0.04	0.03	-.07	-.15	.10	-.14	.15	.12	.07	.20	.15	.14	1							
12. Capital Intensity _{t-1}	0.07	0.05	.14	-.16	.14	-.15	.11	.15	.14	.15	.10	.13	.34	1						
13. Number of Prior Acquisitions _{t-1}	1.85	4.92	-.15	.05	.13	.03	.17	.08	.16	.24	.36	.14	.16	.12	1					
14. CEO Tenure	4.38	1.94	.14	.03	.11	.04	.10	.07	.04	.04	-.17	.04	.03	.12	.20	1				
15. Diversification	0.26	0.53	-.10	-.04	.09	-.04	.05	.10	.17	.28	.45	.34	.14	.16	.66	.07	1			
16. ln (Free Cash Flow _{t-1})	4.94	7.88	.08	-.32	.08	-.24	.04	.27	.38	.45	.56	.17	.18	.12	.21	-.04	.36	1		
17. Outside Blockholders (= 1)	0.62	—	-.15	.04	.04	.05	.04	.06	.06	.04	.14	.15	.11	.04	.05	-.13	.15	.18	1	
18. Relatedness	0.21	0.29	.20	-.20	.10	-.20	.02	.04	-.16	-.23	-.15	-.25	.28	.26	.22	-.36	-.16	-.32	.24	1
19. Likelihood of Acquisition _t	0.13	—	-.21	.35	-.20	.26	-.17	-.05	.12	.38	-.16	.18	-.35	-.24	.24	.26	.15	.46	.18	.43

Notes.
867 acquisition events from 1997 and 2011 representing 692 firms (8,485 firm-years)
All correlations above |0.11| are significant at 0.05 or below (two-tailed test)
All correlations above |0.17| are significant at 0.01 or below (two-tailed test)

Table 2. Random-effects discrete-time logit regression for likelihood of acquisition

	DV = Likelihood of acquisition (t)									
	Historic aspiration					Social aspiration				
	Model 1	Model 2	Model 3 [H1]	Model 4 [H2]	Model 5 [H3]	Model 6	Model 7 [H1]	Model 8 [H2]	Model 9 [H3]	Model 10
Family control _{t-1}			-0.79* (0.34)	-0.85** (0.32)	-0.77* (0.32)			-1.89** (0.65)	-1.84** (0.61)	-1.72* (0.75)
(Performance – aspiration level) _{t-1} < 0		1.39** (0.43)	1.46** (0.52)	1.57** (0.54)	1.39** (0.51)		1.47*** (0.36)	1.45*** (0.44)	1.29** (0.43)	1.31** (0.48)
Absorbed slack _{t-1}		-0.07 (0.12)	-0.09 (0.11)	-0.10 (0.10)	-0.08 (0.10)		-0.13 (0.09)	-0.12 (0.08)	-0.07 (0.07)	-0.09 (0.10)
Unabsorbed slack _{t-1}		0.20* (0.09)	0.16* (0.07)	0.17* (0.07)	0.19* (0.08)		0.32** (0.10)	0.28* (0.13)	0.26* (0.11)	0.27** (0.12)
Potential slack _{t-1}		0.38** (0.13)	0.33*** (0.10)	0.44** (0.15)	0.49** (0.13)		0.41** (0.13)	0.43** (0.14)	0.39* (0.17)	0.39* (0.17)
Family control × (performance – aspiration level) _{t-1} < 0				0.68** (0.24)	0.70* (0.32)				0.87* (0.37)	0.81* (0.39)
Family control × absorbed slack _{t-1}					0.06 (0.08)					0.09 (0.09)
Family control × unabsorbed slack _{t-1}					-0.13** (0.04)					-0.17* (0.07)
Family control × potential slack _{t-1}					-0.18* (0.08)					-0.22** (0.07)
<i>Controls</i>										
(Performance – aspiration level) _{t-1} > 0	-1.75* (0.68)	-1.79** (0.66)	-1.61* (0.68)	-1.53 (0.79)	-1.57* (0.71)	-0.89** (0.33)	-0.82* (0.35)	-0.84* (0.37)	-0.91* (0.36)	-0.82* (0.37)
Distance from bankruptcy _{t-1}	-0.14* (0.06)	-0.12 (0.08)	-0.09 (0.09)	-0.07 (0.10)	-0.08 (0.11)	-0.05 (0.05)	-0.07 (0.07)	-0.05 (0.06)	-0.05 (0.03)	-0.03 (0.03)
Size [ln[assets] _{t-1}]	0.24* (0.11)	0.25* (0.10)	0.21** (0.08)	0.17 (0.12)	0.19 (0.11)	0.14* (0.06)	0.10 (0.11)	0.09 (0.07)	0.11 (0.08)	0.13 (0.012)
R&D intensity _{t-1}	-0.14* (0.06)	-0.12* (0.06)	-0.14* (0.07)	-0.12 (0.07)	-0.09 (0.09)	-0.07 (0.06)	-0.05 (0.05)	-0.05 (0.06)	-0.05 (0.07)	-0.07 (0.08)
Capital intensity _{t-1}	-0.23* (0.09)	-0.25* (0.11)	-0.17* (0.08)	-0.17* (0.08)	-0.19* (0.07)	-0.17* (0.08)	-0.16* (0.08)	-0.15 (0.09)	-0.11* (0.05)	-0.13* (0.06)
Number of prior acquisitions _{t-1}	0.30*** (0.07)	0.32** (0.10)	0.23* (0.10)	0.21 (0.11)	0.19 (0.13)	0.25** (0.09)	0.24* (0.11)	0.19 (0.12)	0.19 (0.13)	0.17 (0.12)
CEO tenure	0.08 (0.10)	0.10 (0.12)	0.09 (0.14)	0.13 (0.11)	0.14 (0.12)	0.15 (0.10)	0.11 (0.09)	0.11 (0.14)	0.13 (0.15)	0.12 (0.17)
Diversification	0.22** (0.08)	0.25** (0.09)	0.15 (0.08)	0.11 (0.07)	0.09 (0.07)	0.12 (0.10)	0.12 (0.12)	0.11 (0.12)	0.13 (0.14)	0.14 (0.16)
ln (free cash flow _{t-1})	0.49** (0.16)	0.52** (0.17)	0.40* (0.19)	0.37 (0.19)	0.42** (0.16)	0.32*** (0.09)	0.33** (0.10)	0.31* (0.13)	0.35* (0.14)	0.29* (0.12)
Outside blockholders _{t-1}	0.25* (0.10)	0.21* (0.10)	0.21 (0.11)	0.25* (0.11)	0.22* (0.10)	0.22* (0.09)	0.24* (0.09)	0.24* (0.12)	0.21 (0.13)	0.19 (0.14)
Intercept	1.69*** (0.27)	1.55** (0.28)	1.42*** (0.35)	1.24** (0.38)	0.98** (0.31)	2.72*** (0.49)	2.68*** (0.51)	2.55*** (0.57)	1.78** (0.62)	1.55* (0.74)
Industry dummies [reference category: 39 – miscellaneous manufacturing]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of acquisitions	724	724	724	724	724	822	822	822	822	822
Wald chi-square	328.66	344.90	349.10	353.29	364.77	219.43	236.01	242.745	249.11	262.88
Change in Wald chi-square		16.24 (4)**	4.20 (1)*	4.19 (1)*	11.48 (3)**		16.58 (4)**	6.73 (1)**	6.37 (1)*	13.77 (3)**

Notes.

867 acquisition events from 1997 and 2011 representing 692 firms (8,485 firm-years)

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table 3. Random-effects two-limit Tobit regression for relatedness of acquisition

	DV = Relatedness of acquisition									
	Historic aspiration					Social aspiration				
	Model 11	Model 12	Model 13 [H4a]	Model 14 [H4b]	Model 15 [H5]	Model 16	Model 17 [H4a]	Model 18 [H4b]	Model 19 [H5]	Model 20
Family control _{t-1}			0.33*** (0.09)	0.28** (0.09)	0.29** (0.10)			0.41** (0.15)	0.39* (0.16)	0.39* (0.17)
Performance – aspiration level) _{t-1} < 0		-0.59*** (0.11)	-0.62*** (0.14)	-0.58** (0.19)	-0.55** (0.20)		-0.47** (0.16)	-0.44* (0.19)	-0.42* (0.17)	-0.39* (0.19)
Absorbed slack _{t-1}		0.09 (0.07)	0.10 (0.09)	0.08 (0.10)	0.05 (0.08)		0.07 (0.08)	0.07 (0.09)	0.08 (0.07)	0.09 (0.06)
Unabsorbed slack _{t-1}		-0.23** (0.07)	-0.22** (0.08)	-0.20* (0.10)	-0.20* (0.10)		-0.11* (0.04)	-0.09* (0.04)	-0.12** (0.04)	-0.13** (0.05)
Potential slack _{t-1}		-0.23* (0.10)	-0.19* (0.08)	-0.17* (0.08)	-0.19* (0.09)		-0.32** (0.10)	-0.27* (0.11)	-0.27* (0.11)	-0.24* (0.12)
Family control × (performance – aspiration level) _{t-1} < 0				-0.32** (0.12)	-0.27* (0.12)				-0.19 (0.12)	-0.14 (0.15)
Family control × absorbed slack _{t-1}					0.07 (0.05)					0.04 (0.05)
Family control × unabsorbed slack _{t-1}					0.10* (0.04)					0.09** (0.03)
Family control × potential slack _{t-1}					0.19** (0.07)					0.22** (0.08)
<i>Controls</i>										
Performance – aspiration level) _{t-1} > 0	0.06 (0.08)	0.09 (0.12)	0.05 (0.106)	0.08 (0.11)	0.08 (0.10)	0.13* (0.05)	0.09 (0.09)	0.09 (0.10)	0.09 (0.09)	0.10 (0.09)
Distance from bankruptcy _{t-1}	-0.11** (0.04)	-0.09 (0.05)	-0.08 (0.06)	-0.07 (0.07)	-0.06 (0.07)	-0.07 (0.07)	-0.09 (0.08)	-0.08 (0.08)	-0.08 (0.07)	-0.09 (0.07)
Size [ln[assets] _{t-1}	-0.22** (0.06)	-0.23** (0.07)	-0.19* (0.08)	-0.14 (0.08)	-0.10 (0.07)	-0.16* (0.07)	-0.19** (0.06)	-0.15 (0.07)	-0.13** (0.05)	-0.17** (0.06)
R&D intensity _{t-1}	0.22* (0.11)	0.21* (0.10)	0.19 (0.12)	0.15 (0.13)	0.14 (0.12)	0.21* (0.13)	0.13* (0.08)	0.13* (0.07)	0.10 (0.08)	0.11 (0.11)
Capital intensity _{t-1}	0.11 (0.09)	0.10 (0.09)	0.07 (0.08)	0.07 (0.07)	0.05 (0.07)	0.09 (0.07)	0.10 (0.10)	0.10 (0.11)	0.06 (0.07)	0.06 (0.14)
Number of prior acquisitions _{t-1}	0.37** (0.12)	0.33* (0.14)	0.25* (0.12)	0.25** (0.11)	0.25* (0.10)	0.24* (0.10)	0.29* (0.13)	0.28** (0.09)	0.31** (0.10)	0.30* (0.12)
CEO tenure	-0.04 (0.03)	-0.05 (0.06)	-0.03 (0.02)	-0.02 (0.01)	-0.02 (0.01)	-0.01 (0.01)	-0.02 (0.04)	-0.02 (0.02)	0.04 (0.05)	-0.05 (0.06)
Diversification	-0.22* (0.11)	-0.18 (0.13)	-0.16 (0.13)	-0.16 (0.14)	-0.15 (0.12)	-0.12* (0.05)	-0.14* (0.07)	-0.17 (0.09)	-0.10 (0.09)	-0.09 (0.11)
ln (free cash flow _{t-1})	-0.64*** (0.17)	-0.49** (0.19)	-0.56*** (0.15)	-0.43* (0.21)	-0.43* (0.19)	-0.77*** (0.21)	-0.68** (0.25)	-0.73** (0.27)	-0.71* (0.32)	-0.68* (0.32)
Outside blockholders _{t-1}	0.23* (0.10)	0.19 (0.11)	0.22* (0.10)	0.22** (0.07)	0.19** (0.07)	0.24* (0.10)	0.21 (0.11)	0.24* (0.12)	0.20 (0.14)	0.20 (0.11)
Inverse-Mills ratio	-0.82*** (0.19)	-0.79*** (0.24)	-0.84** (0.29)	-0.85*** (0.22)	0.78*** (0.23)	-0.68* (0.30)	-0.70* (0.29)	-0.75** (0.27)	-0.68* (0.27)	-0.65** (0.24)
Intercept	1.65** (0.51)	1.68** (0.63)	1.60** (0.56)	1.59** (0.58)	1.25 (0.65)	1.84*** (0.49)	1.59** (0.55)	1.47* (0.62)	1.42* (0.70)	1.48* (0.72)
Industry dummies [reference category: 39 – miscellaneous manufacturing]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of acquisitions	724	724	724	724	724	822	822	822	822	822
Wald chi-square	166.64	178.81	183.17	187.35	197.76	175.23	192.69	197.72	202.46	213.26
Change in Wald chi-square		12.17 (4) *	4.36 (1) *	4.19 (1) *	10.41 (3) *		17.46 (4) **	5.04 (1) **	4.74 (1) *	10.80 (3) *

Notes.

867 acquisition events from 1997 and 2011 representing 692 firms (8,485 firm-years)

* p < 0.05

** p < 0.01

*** p < 0.001

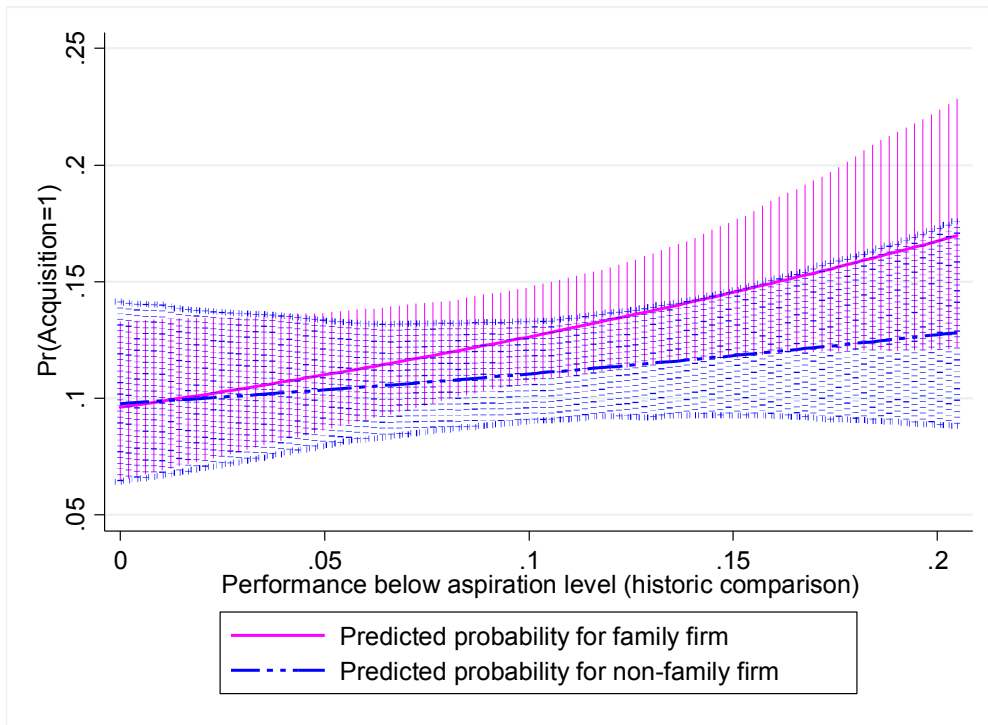


Figure 1(a): Occurrence of acquisition under below-aspiration-level performance (historic comparison)

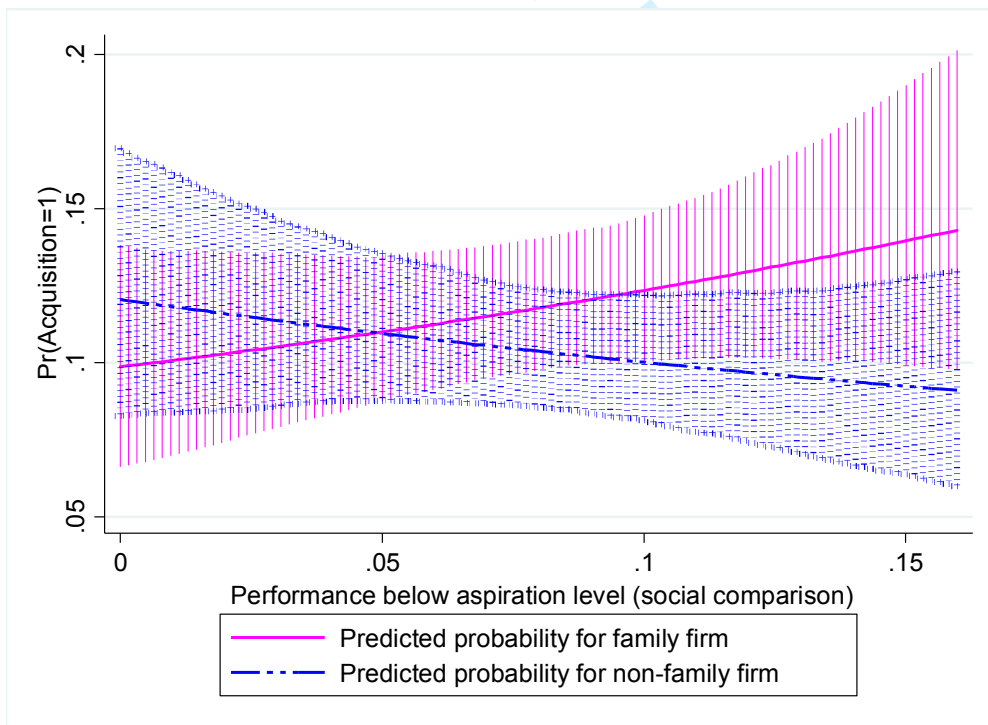


Figure 1(b): Occurrence of acquisition under below-aspiration-level performance (social comparison)

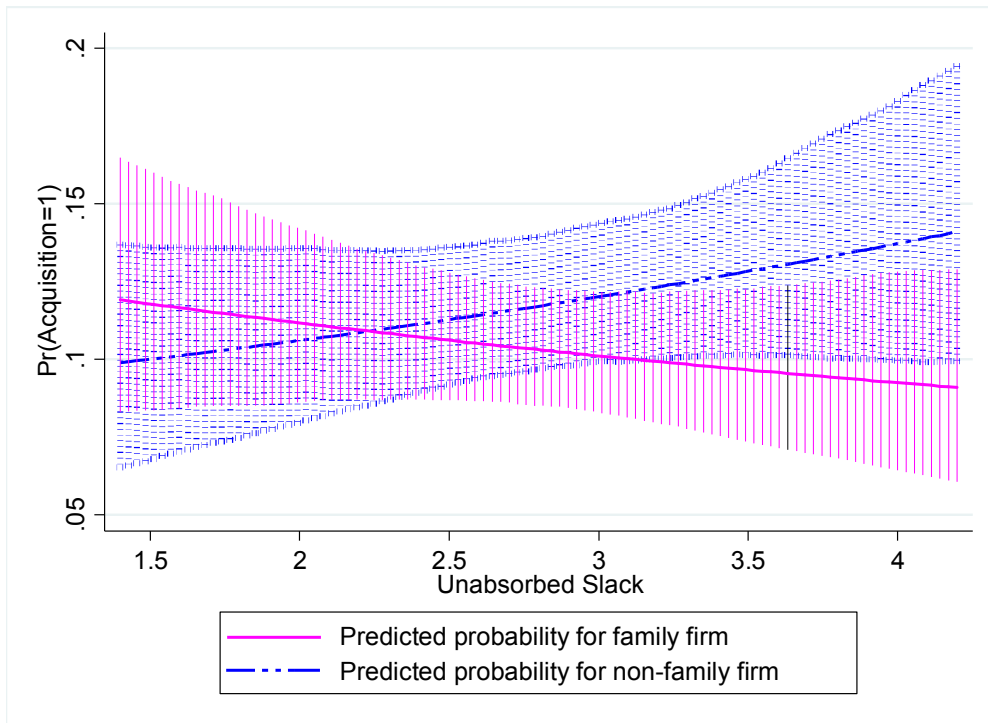


Figure 1(c): Occurrence of acquisition under increasing unabsorbed slack (historic comparison)

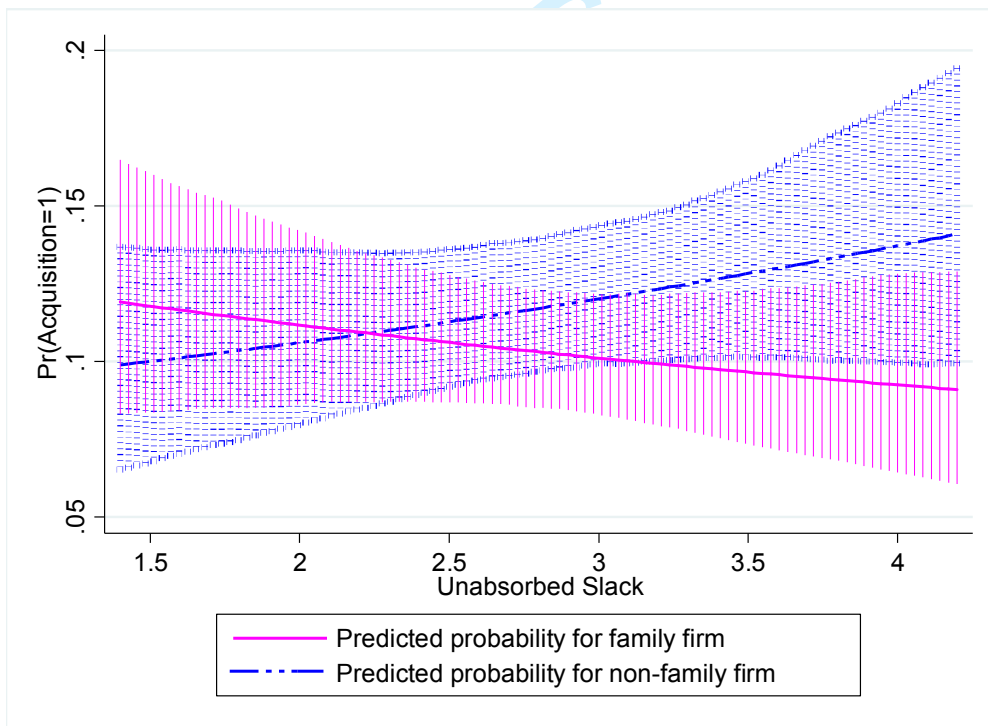


Figure 1(d): Occurrence of acquisition under increasing unabsorbed slack (social comparison)

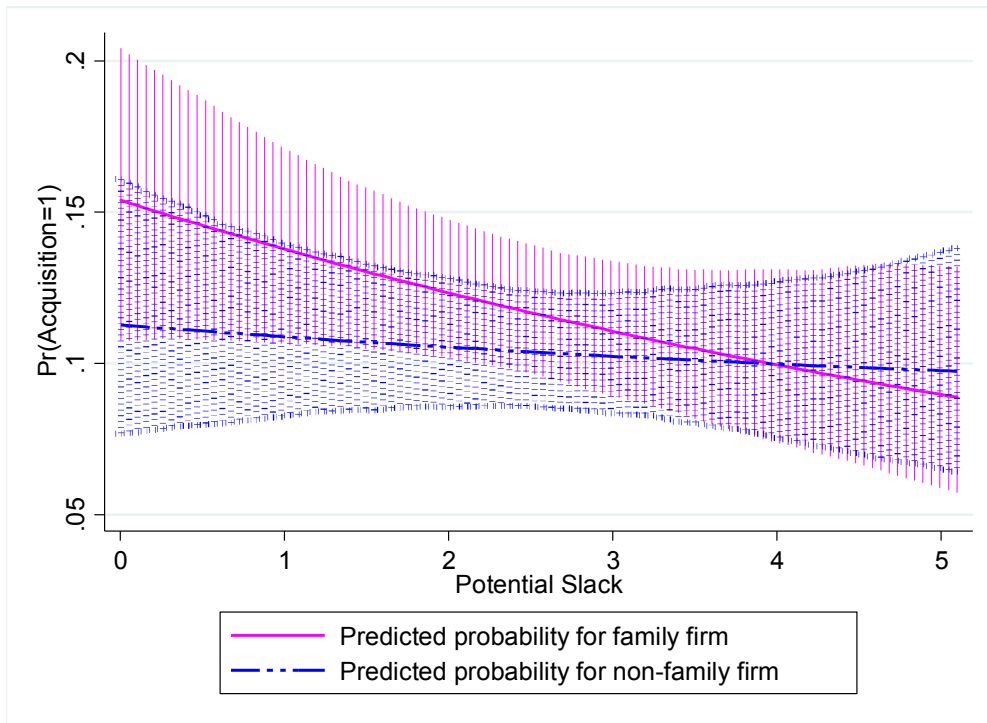


Figure 1(e): Occurrence of acquisition under increasing potential slack (historic comparison)

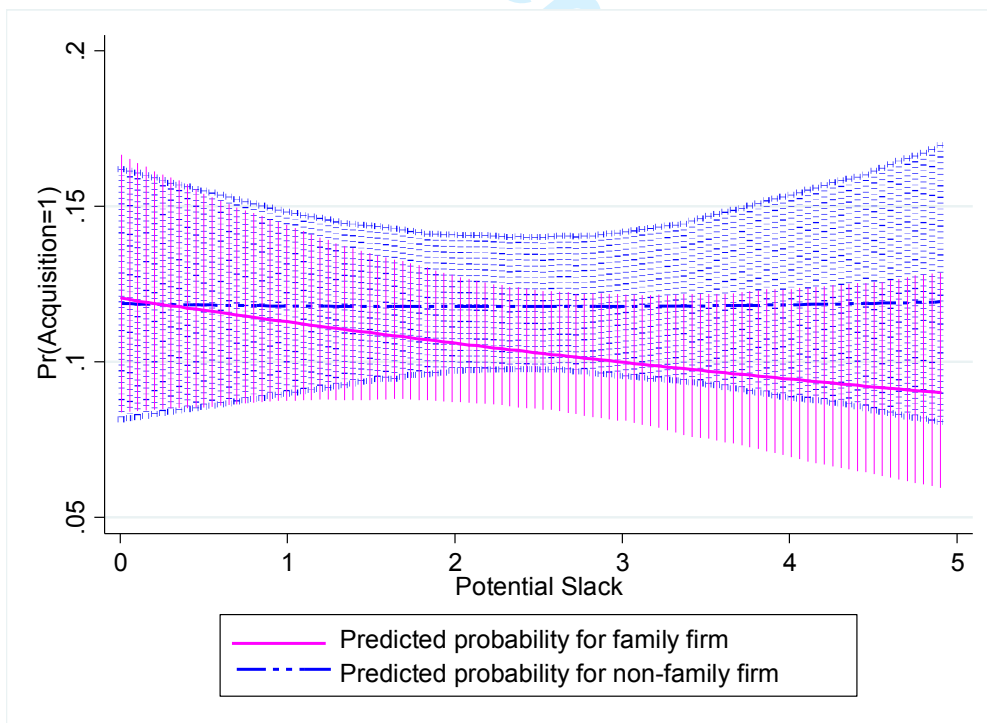


Figure 1(f): Occurrence of acquisition under increasing potential slack (social comparison)

Figure 1. Moderation effects (with 95% confidence intervals)

FOOTNOTES

ⁱ As noted by Berrone *et al.* Berrone, P., Cruz, C. C., & Gomez-Mejia, L. R. 2012. Socioemotional Wealth in Family Firms: A Review and Agenda for Future Research. *Family Business Review*, 25: 258-279.: “Although SEW may not be unique to an organizational context where family ties are present, for family firms the firm generally becomes an integral and inescapable part of their lives. This contrasts with nonfamily shareholders or hired managers for whom the relationship with the firm is more distant, transitory, individualistic and utilitarian.”

ⁱⁱ For the sake of simplicity we use the terms family controlled firms and family firms interchangeably.

ⁱⁱⁱ We also removed acquisitions that were leveraged buyouts, spin-offs, recapitalizations, self-tender offers, exchange offers, repurchases, minority stake purchases, privatizations, or subsidiary firms.

^{iv} Stata 12 option *vce (robust)*.

^v Historic and social aspirations are unbalanced panels, as firms may realize historic aspiration gaps in some years, social aspiration gaps in others, or both in some years or neither in a year. A firm’s positive or negative performance relative to historic/social reference points may be inconsistent from year to year. To test the likelihood of acquisition by a family firm, we pool positive or negative historic/social aspiration outcomes. This is consistent with Chen (2008), Chen and Miller (2007), and Iyer and Miller (2008).

^{vi} We thank an anonymous reviewer for this suggestion.